



Red Hat OpenStack Platform 15

Command Line Interface Reference

Command-line clients for Red Hat OpenStack Platform

Red Hat OpenStack Platform 15 Command Line Interface Reference

Command-line clients for Red Hat OpenStack Platform

OpenStack Documentation Team

rhos-docs@redhat.com

OpenStack Team

rhos-docs@redhat.com

Legal Notice

Copyright © 2020 Red Hat, Inc.

The text of and illustrations in this document are licensed by Red Hat under a Creative Commons Attribution–Share Alike 3.0 Unported license ("CC-BY-SA"). An explanation of CC-BY-SA is available at

<http://creativecommons.org/licenses/by-sa/3.0/>

. In accordance with CC-BY-SA, if you distribute this document or an adaptation of it, you must provide the URL for the original version.

Red Hat, as the licensor of this document, waives the right to enforce, and agrees not to assert, Section 4d of CC-BY-SA to the fullest extent permitted by applicable law.

Red Hat, Red Hat Enterprise Linux, the Shadowman logo, the Red Hat logo, JBoss, OpenShift, Fedora, the Infinity logo, and RHCE are trademarks of Red Hat, Inc., registered in the United States and other countries.

Linux[®] is the registered trademark of Linus Torvalds in the United States and other countries.

Java[®] is a registered trademark of Oracle and/or its affiliates.

XFS[®] is a trademark of Silicon Graphics International Corp. or its subsidiaries in the United States and/or other countries.

MySQL[®] is a registered trademark of MySQL AB in the United States, the European Union and other countries.

Node.js[®] is an official trademark of Joyent. Red Hat is not formally related to or endorsed by the official Joyent Node.js open source or commercial project.

The OpenStack[®] Word Mark and OpenStack logo are either registered trademarks/service marks or trademarks/service marks of the OpenStack Foundation, in the United States and other countries and are used with the OpenStack Foundation's permission. We are not affiliated with, endorsed or sponsored by the OpenStack Foundation, or the OpenStack community.

All other trademarks are the property of their respective owners.

Abstract

A reference to the commands available to the unified OpenStack command-line client.

Table of Contents

PREFACE	25
CHAPTER 1. THE OPENSTACK CLIENT	26
CHAPTER 2. ACCESS	38
2.1. ACCESS TOKEN CREATE	38
CHAPTER 3. ACL	40
3.1. ACL DELETE	40
3.2. ACL GET	40
3.3. ACL SUBMIT	41
3.4. ACL USER ADD	43
3.5. ACL USER REMOVE	45
CHAPTER 4. ACTION	47
4.1. ACTION DEFINITION CREATE	47
4.2. ACTION DEFINITION DEFINITION SHOW	49
4.3. ACTION DEFINITION DELETE	49
4.4. ACTION DEFINITION LIST	49
4.5. ACTION DEFINITION SHOW	51
4.6. ACTION DEFINITION UPDATE	52
4.7. ACTION EXECUTION DELETE	54
4.8. ACTION EXECUTION INPUT SHOW	55
4.9. ACTION EXECUTION LIST	55
4.10. ACTION EXECUTION OUTPUT SHOW	57
4.11. ACTION EXECUTION RUN	57
4.12. ACTION EXECUTION SHOW	59
4.13. ACTION EXECUTION UPDATE	60
CHAPTER 5. ADDRESS	63
5.1. ADDRESS SCOPE CREATE	63
5.2. ADDRESS SCOPE DELETE	64
5.3. ADDRESS SCOPE LIST	65
5.4. ADDRESS SCOPE SET	66
5.5. ADDRESS SCOPE SHOW	67
CHAPTER 6. AGGREGATE	69
6.1. AGGREGATE ADD HOST	69
6.2. AGGREGATE CREATE	70
6.3. AGGREGATE DELETE	71
6.4. AGGREGATE LIST	72
6.5. AGGREGATE REMOVE HOST	73
6.6. AGGREGATE SET	74
6.7. AGGREGATE SHOW	75
6.8. AGGREGATE UNSET	76
CHAPTER 7. ALARM	78
7.1. ALARM CREATE	78
7.2. ALARM DELETE	81
7.3. ALARM-HISTORY SEARCH	82
7.4. ALARM-HISTORY SHOW	83
7.5. ALARM LIST	85
7.6. ALARM SHOW	86

7.7. ALARM STATE GET	87
7.8. ALARM STATE SET	89
7.9. ALARM UPDATE	90
CHAPTER 8. ALARMING	95
8.1. ALARMING CAPABILITIES LIST	95
CHAPTER 9. APPLICATION	97
9.1. APPLICATION CREDENTIAL CREATE	97
9.2. APPLICATION CREDENTIAL DELETE	99
9.3. APPLICATION CREDENTIAL LIST	99
9.4. APPLICATION CREDENTIAL SHOW	100
CHAPTER 10. AVAILABILITY	103
10.1. AVAILABILITY ZONE LIST	103
CHAPTER 11. BAREMETAL	105
11.1. BAREMETAL ALLOCATION CREATE	105
11.2. BAREMETAL ALLOCATION DELETE	106
11.3. BAREMETAL ALLOCATION LIST	107
11.4. BAREMETAL ALLOCATION SHOW	109
11.5. BAREMETAL CHASSIS CREATE	110
11.6. BAREMETAL CHASSIS DELETE	112
11.7. BAREMETAL CHASSIS LIST	112
11.8. BAREMETAL CHASSIS SET	114
11.9. BAREMETAL CHASSIS SHOW	114
11.10. BAREMETAL CHASSIS UNSET	116
11.11. BAREMETAL CONDUCTOR LIST	116
11.12. BAREMETAL CONDUCTOR SHOW	118
11.13. BAREMETAL CREATE	119
11.14. BAREMETAL DEPLOY TEMPLATE CREATE	120
11.15. BAREMETAL DEPLOY TEMPLATE DELETE	122
11.16. BAREMETAL DEPLOY TEMPLATE LIST	122
11.17. BAREMETAL DEPLOY TEMPLATE SET	124
11.18. BAREMETAL DEPLOY TEMPLATE SHOW	125
11.19. BAREMETAL DEPLOY TEMPLATE UNSET	126
11.20. BAREMETAL DRIVER LIST	127
11.21. BAREMETAL DRIVER PASSTHRU CALL	128
11.22. BAREMETAL DRIVER PASSTHRU LIST	130
11.23. BAREMETAL DRIVER PROPERTY LIST	131
11.24. BAREMETAL DRIVER RAID PROPERTY LIST	133
11.25. BAREMETAL DRIVER SHOW	134
11.26. BAREMETAL INTROSPECTION ABORT	136
11.27. BAREMETAL INTROSPECTION DATA SAVE	136
11.28. BAREMETAL INTROSPECTION INTERFACE LIST	137
11.29. BAREMETAL INTROSPECTION INTERFACE SHOW	138
11.30. BAREMETAL INTROSPECTION LIST	140
11.31. BAREMETAL INTROSPECTION REPROCESS	141
11.32. BAREMETAL INTROSPECTION RULE DELETE	142
11.33. BAREMETAL INTROSPECTION RULE IMPORT	142
11.34. BAREMETAL INTROSPECTION RULE LIST	143
11.35. BAREMETAL INTROSPECTION RULE PURGE	145
11.36. BAREMETAL INTROSPECTION RULE SHOW	145
11.37. BAREMETAL INTROSPECTION START	146

11.38. BAREMETAL INTROSPECTION STATUS	148
11.39. BAREMETAL NODE ABORT	149
11.40. BAREMETAL NODE ADD TRAIT	150
11.41. BAREMETAL NODE ADOPT	150
11.42. BAREMETAL NODE BIOS SETTING LIST	151
11.43. BAREMETAL NODE BIOS SETTING SHOW	152
11.44. BAREMETAL NODE BOOT DEVICE SET	154
11.45. BAREMETAL NODE BOOT DEVICE SHOW	154
11.46. BAREMETAL NODE CLEAN	156
11.47. BAREMETAL NODE CONSOLE DISABLE	157
11.48. BAREMETAL NODE CONSOLE ENABLE	157
11.49. BAREMETAL NODE CONSOLE SHOW	157
11.50. BAREMETAL NODE CREATE	159
11.51. BAREMETAL NODE DELETE	162
11.52. BAREMETAL NODE DEPLOY	162
11.53. BAREMETAL NODE INJECT NMI	163
11.54. BAREMETAL NODE INSPECT	164
11.55. BAREMETAL NODE LIST	164
11.56. BAREMETAL NODE MAINTENANCE SET	167
11.57. BAREMETAL NODE MAINTENANCE UNSET	167
11.58. BAREMETAL NODE MANAGE	168
11.59. BAREMETAL NODE PASSTHRU CALL	168
11.60. BAREMETAL NODE PASSTHRU LIST	169
11.61. BAREMETAL NODE POWER OFF	170
11.62. BAREMETAL NODE POWER ON	171
11.63. BAREMETAL NODE PROVIDE	171
11.64. BAREMETAL NODE REBOOT	172
11.65. BAREMETAL NODE REBUILD	172
11.66. BAREMETAL NODE REMOVE TRAIT	173
11.67. BAREMETAL NODE RESCUE	174
11.68. BAREMETAL NODE SET	174
11.69. BAREMETAL NODE SHOW	177
11.70. BAREMETAL NODE TRAIT LIST	179
11.71. BAREMETAL NODE UNDEPLOY	180
11.72. BAREMETAL NODE UNRESCUE	181
11.73. BAREMETAL NODE UNSET	181
11.74. BAREMETAL NODE VALIDATE	183
11.75. BAREMETAL NODE VIF ATTACH	185
11.76. BAREMETAL NODE VIF DETACH	185
11.77. BAREMETAL NODE VIF LIST	186
11.78. BAREMETAL PORT CREATE	187
11.79. BAREMETAL PORT DELETE	189
11.80. BAREMETAL PORT GROUP CREATE	190
11.81. BAREMETAL PORT GROUP DELETE	192
11.82. BAREMETAL PORT GROUP LIST	192
11.83. BAREMETAL PORT GROUP SET	194
11.84. BAREMETAL PORT GROUP SHOW	195
11.85. BAREMETAL PORT GROUP UNSET	197
11.86. BAREMETAL PORT LIST	197
11.87. BAREMETAL PORT SET	199
11.88. BAREMETAL PORT SHOW	200
11.89. BAREMETAL PORT UNSET	202
11.90. BAREMETAL VOLUME CONNECTOR CREATE	202

11.91. BAREMETAL VOLUME CONNECTOR DELETE	204
11.92. BAREMETAL VOLUME CONNECTOR LIST	204
11.93. BAREMETAL VOLUME CONNECTOR SET	206
11.94. BAREMETAL VOLUME CONNECTOR SHOW	207
11.95. BAREMETAL VOLUME CONNECTOR UNSET	208
11.96. BAREMETAL VOLUME TARGET CREATE	209
11.97. BAREMETAL VOLUME TARGET DELETE	211
11.98. BAREMETAL VOLUME TARGET LIST	211
11.99. BAREMETAL VOLUME TARGET SET	213
11.100. BAREMETAL VOLUME TARGET SHOW	214
11.101. BAREMETAL VOLUME TARGET UNSET	215
CHAPTER 12. BGP	217
12.1. BGP DRAGENT ADD SPEAKER	217
12.2. BGP DRAGENT REMOVE SPEAKER	217
12.3. BGP PEER CREATE	218
12.4. BGP PEER DELETE	219
12.5. BGP PEER LIST	220
12.6. BGP PEER SET	221
12.7. BGP PEER SHOW	222
12.8. BGP SPEAKER ADD NETWORK	223
12.9. BGP SPEAKER ADD PEER	223
12.10. BGP SPEAKER CREATE	224
12.11. BGP SPEAKER DELETE	226
12.12. BGP SPEAKER LIST ADVERTISED ROUTES	226
12.13. BGP SPEAKER LIST	228
12.14. BGP SPEAKER REMOVE NETWORK	229
12.15. BGP SPEAKER REMOVE PEER	230
12.16. BGP SPEAKER SET	230
12.17. BGP SPEAKER SHOW DRAGENTS	231
12.18. BGP SPEAKER SHOW	232
CHAPTER 13. BGPVPN	235
13.1. BGPVPN CREATE	235
13.2. BGPVPN DELETE	237
13.3. BGPVPN LIST	237
13.4. BGPVPN NETWORK ASSOCIATION CREATE	238
13.5. BGPVPN NETWORK ASSOCIATION DELETE	240
13.6. BGPVPN NETWORK ASSOCIATION LIST	241
13.7. BGPVPN NETWORK ASSOCIATION SHOW	242
13.8. BGPVPN PORT ASSOCIATION CREATE	244
13.9. BGPVPN PORT ASSOCIATION DELETE	246
13.10. BGPVPN PORT ASSOCIATION LIST	246
13.11. BGPVPN PORT ASSOCIATION SET	248
13.12. BGPVPN PORT ASSOCIATION SHOW	249
13.13. BGPVPN PORT ASSOCIATION UNSET	250
13.14. BGPVPN ROUTER ASSOCIATION CREATE	251
13.15. BGPVPN ROUTER ASSOCIATION DELETE	253
13.16. BGPVPN ROUTER ASSOCIATION LIST	253
13.17. BGPVPN ROUTER ASSOCIATION SET	255
13.18. BGPVPN ROUTER ASSOCIATION SHOW	256
13.19. BGPVPN ROUTER ASSOCIATION UNSET	257
13.20. BGPVPN SET	258

13.21. BGPVPN SHOW	259
13.22. BGPVPN UNSET	260
CHAPTER 14. CA	262
14.1. CA GET	262
14.2. CA LIST	263
CHAPTER 15. CATALOG	265
15.1. CATALOG LIST	265
15.2. CATALOG SHOW	266
CHAPTER 16. COE	268
16.1. COE CA ROTATE	268
16.2. COE CA SHOW	268
16.3. COE CA SIGN	268
16.4. COE CLUSTER CONFIG	269
16.5. COE CLUSTER CREATE	270
16.6. COE CLUSTER DELETE	271
16.7. COE CLUSTER LIST	271
16.8. COE CLUSTER SHOW	273
16.9. COE CLUSTER TEMPLATE CREATE	274
16.10. COE CLUSTER TEMPLATE DELETE	277
16.11. COE CLUSTER TEMPLATE LIST	278
16.12. COE CLUSTER TEMPLATE SHOW	279
16.13. COE CLUSTER TEMPLATE UPDATE	281
16.14. COE CLUSTER UPDATE	282
16.15. COE QUOTAS CREATE	283
16.16. COE QUOTAS DELETE	283
16.17. COE QUOTAS LIST	283
16.18. COE QUOTAS SHOW	284
16.19. COE QUOTAS UPDATE	284
16.20. COE SERVICE LIST	285
16.21. COE STATS LIST	286
CHAPTER 17. COMMAND	287
17.1. COMMAND LIST	287
CHAPTER 18. COMPLETE.ADOC	289
18.1. COMPLETE	289
CHAPTER 19. COMPUTE	290
19.1. COMPUTE AGENT CREATE	290
19.2. COMPUTE AGENT DELETE	291
19.3. COMPUTE AGENT LIST	292
19.4. COMPUTE AGENT SET	293
19.5. COMPUTE SERVICE DELETE	294
19.6. COMPUTE SERVICE LIST	294
19.7. COMPUTE SERVICE SET	295
CHAPTER 20. CONFIGURATION	297
20.1. CONFIGURATION SHOW	297
CHAPTER 21. CONSISTENCY	299
21.1. CONSISTENCY GROUP ADD VOLUME	299
21.2. CONSISTENCY GROUP CREATE	299

21.3. CONSISTENCY GROUP DELETE	301
21.4. CONSISTENCY GROUP LIST	301
21.5. CONSISTENCY GROUP REMOVE VOLUME	303
21.6. CONSISTENCY GROUP SET	303
21.7. CONSISTENCY GROUP SHOW	304
21.8. CONSISTENCY GROUP SNAPSHOT CREATE	305
21.9. CONSISTENCY GROUP SNAPSHOT DELETE	307
21.10. CONSISTENCY GROUP SNAPSHOT LIST	307
21.11. CONSISTENCY GROUP SNAPSHOT SHOW	309
CHAPTER 22. CONSOLE	311
22.1. CONSOLE LOG SHOW	311
22.2. CONSOLE URL SHOW	311
CHAPTER 23. CONSUMER	314
23.1. CONSUMER CREATE	314
23.2. CONSUMER DELETE	315
23.3. CONSUMER LIST	315
23.4. CONSUMER SET	316
23.5. CONSUMER SHOW	317
CHAPTER 24. CONTAINER	319
24.1. CONTAINER CREATE	319
24.2. CONTAINER DELETE	320
24.3. CONTAINER LIST	321
24.4. CONTAINER SAVE	322
24.5. CONTAINER SET	322
24.6. CONTAINER SHOW	323
24.7. CONTAINER UNSET	324
CHAPTER 25. CREDENTIAL	326
25.1. CREDENTIAL CREATE	326
25.2. CREDENTIAL DELETE	327
25.3. CREDENTIAL LIST	327
25.4. CREDENTIAL SET	329
25.5. CREDENTIAL SHOW	330
CHAPTER 26. CRON	332
26.1. CRON TRIGGER CREATE	332
26.2. CRON TRIGGER DELETE	333
26.3. CRON TRIGGER LIST	334
26.4. CRON TRIGGER SHOW	335
CHAPTER 27. DATASTORE	338
27.1. DATASTORE LIST	338
27.2. DATASTORE SHOW	339
27.3. DATASTORE VERSION LIST	340
27.4. DATASTORE VERSION SHOW	341
CHAPTER 28. DNS	344
28.1. DNS QUOTA LIST	344
28.2. DNS QUOTA RESET	345
28.3. DNS QUOTA SET	345
28.4. DNS SERVICE LIST	347
28.5. DNS SERVICE SHOW	349

CHAPTER 29. DOMAIN	351
29.1. DOMAIN CREATE	351
29.2. DOMAIN DELETE	352
29.3. DOMAIN LIST	352
29.4. DOMAIN SET	354
29.5. DOMAIN SHOW	354
CHAPTER 30. EC2	357
30.1. EC2 CREDENTIALS CREATE	357
30.2. EC2 CREDENTIALS DELETE	358
30.3. EC2 CREDENTIALS LIST	359
30.4. EC2 CREDENTIALS SHOW	360
CHAPTER 31. ENDPOINT	362
31.1. ENDPOINT ADD PROJECT	362
31.2. ENDPOINT CREATE	362
31.3. ENDPOINT DELETE	364
31.4. ENDPOINT GROUP ADD PROJECT	364
31.5. ENDPOINT GROUP CREATE	365
31.6. ENDPOINT GROUP DELETE	366
31.7. ENDPOINT GROUP LIST	367
31.8. ENDPOINT GROUP REMOVE PROJECT	368
31.9. ENDPOINT GROUP SET	369
31.10. ENDPOINT GROUP SHOW	369
31.11. ENDPOINT LIST	371
31.12. ENDPOINT REMOVE PROJECT	372
31.13. ENDPOINT SET	373
31.14. ENDPOINT SHOW	374
CHAPTER 32. EVENT	376
32.1. EVENT TRIGGER CREATE	376
32.2. EVENT TRIGGER DELETE	377
32.3. EVENT TRIGGER LIST	378
32.4. EVENT TRIGGER SHOW	379
CHAPTER 33. EXTENSION	382
33.1. EXTENSION LIST	382
33.2. EXTENSION SHOW	383
CHAPTER 34. FEDERATION	385
34.1. FEDERATION DOMAIN LIST	385
34.2. FEDERATION PROJECT LIST	386
34.3. FEDERATION PROTOCOL CREATE	387
34.4. FEDERATION PROTOCOL DELETE	389
34.5. FEDERATION PROTOCOL LIST	389
34.6. FEDERATION PROTOCOL SET	390
34.7. FEDERATION PROTOCOL SHOW	391
CHAPTER 35. FLAVOR	393
35.1. FLAVOR CREATE	393
35.2. FLAVOR DELETE	395
35.3. FLAVOR LIST	395
35.4. FLAVOR SET	397
35.5. FLAVOR SHOW	398
35.6. FLAVOR UNSET	399

CHAPTER 36. FLOATING	401
36.1. FLOATING IP CREATE	401
36.2. FLOATING IP DELETE	403
36.3. FLOATING IP LIST	403
36.4. FLOATING IP POOL LIST	405
36.5. FLOATING IP SET	407
36.6. FLOATING IP SHOW	408
36.7. FLOATING IP UNSET	409
CHAPTER 37. GROUP	411
37.1. GROUP ADD USER	411
37.2. GROUP CONTAINS USER	411
37.3. GROUP CREATE	412
37.4. GROUP DELETE	413
37.5. GROUP LIST	414
37.6. GROUP REMOVE USER	415
37.7. GROUP SET	416
37.8. GROUP SHOW	417
CHAPTER 38. HELP.ADOC	419
38.1. HELP	419
CHAPTER 39. HOST	420
39.1. HOST LIST	420
39.2. HOST SET	421
39.3. HOST SHOW	422
CHAPTER 40. HYPERVISOR	424
40.1. HYPERVISOR LIST	424
40.2. HYPERVISOR SHOW	425
40.3. HYPERVISOR STATS SHOW	426
CHAPTER 41. IDENTITY	428
41.1. IDENTITY PROVIDER CREATE	428
41.2. IDENTITY PROVIDER DELETE	429
41.3. IDENTITY PROVIDER LIST	430
41.4. IDENTITY PROVIDER SET	431
41.5. IDENTITY PROVIDER SHOW	432
CHAPTER 42. IMAGE	434
42.1. IMAGE ADD PROJECT	434
42.2. IMAGE CREATE	435
42.3. IMAGE DELETE	438
42.4. IMAGE LIST	438
42.5. IMAGE MEMBER LIST	440
42.6. IMAGE REMOVE PROJECT	442
42.7. IMAGE SAVE	442
42.8. IMAGE SET	443
42.9. IMAGE SHOW	445
42.10. IMAGE UNSET	446
CHAPTER 43. IMPLIED	448
43.1. IMPLIED ROLE CREATE	448
43.2. IMPLIED ROLE DELETE	449
43.3. IMPLIED ROLE LIST	449

CHAPTER 44. IP	452
44.1. IP AVAILABILITY LIST	452
44.2. IP AVAILABILITY SHOW	453
CHAPTER 45. KEYPAIR	455
45.1. KEYPAIR CREATE	455
45.2. KEYPAIR DELETE	456
45.3. KEYPAIR LIST	457
45.4. KEYPAIR SHOW	458
CHAPTER 46. L2GW	460
46.1. L2GW CONNECTION CREATE	460
46.2. L2GW CONNECTION DELETE	461
46.3. L2GW CONNECTION LIST	462
46.4. L2GW CONNECTION SHOW	463
46.5. L2GW CREATE	464
46.6. L2GW DELETE	466
46.7. L2GW LIST	466
46.8. L2GW SHOW	468
46.9. L2GW UPDATE	469
CHAPTER 47. LIMIT	471
47.1. LIMIT CREATE	471
47.2. LIMIT DELETE	472
47.3. LIMIT LIST	473
47.4. LIMIT SET	474
47.5. LIMIT SHOW	475
CHAPTER 48. LIMITS	478
48.1. LIMITS SHOW	478
CHAPTER 49. LOADBALANCER	480
49.1. LOADBALANCER AMPHORA CONFIGURE	480
49.2. LOADBALANCER AMPHORA FAILOVER	480
49.3. LOADBALANCER AMPHORA LIST	480
49.4. LOADBALANCER AMPHORA SHOW	482
49.5. LOADBALANCER CREATE	483
49.6. LOADBALANCER DELETE	485
49.7. LOADBALANCER FAILOVER	486
49.8. LOADBALANCER FLAVOR CREATE	486
49.9. LOADBALANCER FLAVOR DELETE	488
49.10. LOADBALANCER FLAVOR LIST	488
49.11. LOADBALANCER FLAVOR SET	490
49.12. LOADBALANCER FLAVOR SHOW	490
49.13. LOADBALANCER FLAVORPROFILE CREATE	492
49.14. LOADBALANCER FLAVORPROFILE DELETE	493
49.15. LOADBALANCER FLAVORPROFILE LIST	493
49.16. LOADBALANCER FLAVORPROFILE SET	495
49.17. LOADBALANCER FLAVORPROFILE SHOW	496
49.18. LOADBALANCER HEALTHMONITOR CREATE	497
49.19. LOADBALANCER HEALTHMONITOR DELETE	499
49.20. LOADBALANCER HEALTHMONITOR LIST	500
49.21. LOADBALANCER HEALTHMONITOR SET	501
49.22. LOADBALANCER HEALTHMONITOR SHOW	502

49.23. LOADBALANCER L7POLICY CREATE	504
49.24. LOADBALANCER L7POLICY DELETE	506
49.25. LOADBALANCER L7POLICY LIST	506
49.26. LOADBALANCER L7POLICY SET	507
49.27. LOADBALANCER L7POLICY SHOW	509
49.28. LOADBALANCER L7RULE CREATE	510
49.29. LOADBALANCER L7RULE DELETE	512
49.30. LOADBALANCER L7RULE LIST	512
49.31. LOADBALANCER L7RULE SET	514
49.32. LOADBALANCER L7RULE SHOW	515
49.33. LOADBALANCER LIST	516
49.34. LOADBALANCER LISTENER CREATE	518
49.35. LOADBALANCER LISTENER DELETE	521
49.36. LOADBALANCER LISTENER LIST	522
49.37. LOADBALANCER LISTENER SET	523
49.38. LOADBALANCER LISTENER SHOW	525
49.39. LOADBALANCER LISTENER STATS SHOW	526
49.40. LOADBALANCER MEMBER CREATE	527
49.41. LOADBALANCER MEMBER DELETE	530
49.42. LOADBALANCER MEMBER LIST	530
49.43. LOADBALANCER MEMBER SET	531
49.44. LOADBALANCER MEMBER SHOW	532
49.45. LOADBALANCER POOL CREATE	534
49.46. LOADBALANCER POOL DELETE	536
49.47. LOADBALANCER POOL LIST	537
49.48. LOADBALANCER POOL SET	538
49.49. LOADBALANCER POOL SHOW	539
49.50. LOADBALANCER PROVIDER CAPABILITY LIST	540
49.51. LOADBALANCER PROVIDER LIST	542
49.52. LOADBALANCER QUOTA DEFAULTS SHOW	543
49.53. LOADBALANCER QUOTA LIST	544
49.54. LOADBALANCER QUOTA RESET	546
49.55. LOADBALANCER QUOTA SET	546
49.56. LOADBALANCER QUOTA SHOW	548
49.57. LOADBALANCER SET	549
49.58. LOADBALANCER SHOW	550
49.59. LOADBALANCER STATS SHOW	551
49.60. LOADBALANCER STATUS SHOW	553
CHAPTER 50. MAPPING	554
50.1. MAPPING CREATE	554
50.2. MAPPING DELETE	555
50.3. MAPPING LIST	555
50.4. MAPPING SET	557
50.5. MAPPING SHOW	557
CHAPTER 51. MESSAGING	559
51.1. MESSAGING CLAIM CREATE	559
51.2. MESSAGING CLAIM QUERY	560
51.3. MESSAGING CLAIM RELEASE	562
51.4. MESSAGING CLAIM RENEW	562
51.5. MESSAGING FLAVOR CREATE	564
51.6. MESSAGING FLAVOR DELETE	565

51.7. MESSAGING FLAVOR LIST	566
51.8. MESSAGING FLAVOR SHOW	567
51.9. MESSAGING FLAVOR UPDATE	569
51.10. MESSAGING HEALTH	570
51.11. MESSAGING HOMEDOC	570
51.12. MESSAGING MESSAGE LIST	571
51.13. MESSAGING MESSAGE POST	572
51.14. MESSAGING PING	573
51.15. MESSAGING POOL CREATE	574
51.16. MESSAGING POOL DELETE	576
51.17. MESSAGING POOL LIST	576
51.18. MESSAGING POOL SHOW	578
51.19. MESSAGING POOL UPDATE	579
51.20. MESSAGING QUEUE CREATE	581
51.21. MESSAGING QUEUE DELETE	582
51.22. MESSAGING QUEUE GET METADATA	582
51.23. MESSAGING QUEUE LIST	584
51.24. MESSAGING QUEUE PURGE	585
51.25. MESSAGING QUEUE SET METADATA	586
51.26. MESSAGING QUEUE SIGNED URL	586
51.27. MESSAGING QUEUE STATS	588
51.28. MESSAGING SUBSCRIPTION CREATE	589
51.29. MESSAGING SUBSCRIPTION DELETE	591
51.30. MESSAGING SUBSCRIPTION LIST	591
51.31. MESSAGING SUBSCRIPTION SHOW	593
51.32. MESSAGING SUBSCRIPTION UPDATE	594
CHAPTER 52. METRIC	597
52.1. METRIC AGGREGATES	597
52.2. METRIC ARCHIVE-POLICY CREATE	599
52.3. METRIC ARCHIVE-POLICY DELETE	600
52.4. METRIC ARCHIVE-POLICY LIST	601
52.5. METRIC ARCHIVE-POLICY-RULE CREATE	602
52.6. METRIC ARCHIVE-POLICY-RULE DELETE	604
52.7. METRIC ARCHIVE-POLICY-RULE LIST	604
52.8. METRIC ARCHIVE-POLICY-RULE SHOW	605
52.9. METRIC ARCHIVE-POLICY SHOW	607
52.10. METRIC ARCHIVE-POLICY UPDATE	608
52.11. METRIC BENCHMARK MEASURES ADD	609
52.12. METRIC BENCHMARK MEASURES SHOW	611
52.13. METRIC BENCHMARK METRIC CREATE	613
52.14. METRIC BENCHMARK METRIC SHOW	615
52.15. METRIC CAPABILITIES LIST	616
52.16. METRIC CREATE	617
52.17. METRIC DELETE	619
52.18. METRIC LIST	619
52.19. METRIC MEASURES ADD	621
52.20. METRIC MEASURES AGGREGATION	621
52.21. METRIC MEASURES BATCH-METRICS	624
52.22. METRIC MEASURES BATCH-RESOURCES-METRICS	624
52.23. METRIC MEASURES SHOW	625
52.24. METRIC METRIC CREATE	627
52.25. METRIC METRIC DELETE	628

52.26. METRIC METRIC LIST	629
52.27. METRIC METRIC SHOW	630
52.28. METRIC RESOURCE BATCH DELETE	631
52.29. METRIC RESOURCE CREATE	633
52.30. METRIC RESOURCE DELETE	635
52.31. METRIC RESOURCE HISTORY	635
52.32. METRIC RESOURCE LIST	637
52.33. METRIC RESOURCE SEARCH	638
52.34. METRIC RESOURCE SHOW	640
52.35. METRIC RESOURCE-TYPE CREATE	642
52.36. METRIC RESOURCE-TYPE DELETE	643
52.37. METRIC RESOURCE-TYPE LIST	644
52.38. METRIC RESOURCE-TYPE SHOW	645
52.39. METRIC RESOURCE-TYPE UPDATE	646
52.40. METRIC RESOURCE UPDATE	648
52.41. METRIC SERVER VERSION	650
52.42. METRIC SHOW	651
52.43. METRIC STATUS	652
CHAPTER 53. MODULE	654
53.1. MODULE LIST	654
CHAPTER 54. NETWORK	656
54.1. NETWORK AGENT ADD NETWORK	656
54.2. NETWORK AGENT ADD ROUTER	656
54.3. NETWORK AGENT DELETE	657
54.4. NETWORK AGENT LIST	657
54.5. NETWORK AGENT REMOVE NETWORK	659
54.6. NETWORK AGENT REMOVE ROUTER	659
54.7. NETWORK AGENT SET	660
54.8. NETWORK AGENT SHOW	660
54.9. NETWORK AUTO ALLOCATED TOPOLOGY CREATE	662
54.10. NETWORK AUTO ALLOCATED TOPOLOGY DELETE	663
54.11. NETWORK CREATE	664
54.12. NETWORK DELETE	667
54.13. NETWORK FLAVOR ADD PROFILE	667
54.14. NETWORK FLAVOR CREATE	668
54.15. NETWORK FLAVOR DELETE	669
54.16. NETWORK FLAVOR LIST	670
54.17. NETWORK FLAVOR PROFILE CREATE	671
54.18. NETWORK FLAVOR PROFILE DELETE	673
54.19. NETWORK FLAVOR PROFILE LIST	673
54.20. NETWORK FLAVOR PROFILE SET	674
54.21. NETWORK FLAVOR PROFILE SHOW	675
54.22. NETWORK FLAVOR REMOVE PROFILE	677
54.23. NETWORK FLAVOR SET	677
54.24. NETWORK FLAVOR SHOW	678
54.25. NETWORK LIST	679
54.26. NETWORK LOG CREATE	682
54.27. NETWORK LOG DELETE	684
54.28. NETWORK LOG LIST	684
54.29. NETWORK LOG SET	686
54.30. NETWORK LOG SHOW	686

54.31. NETWORK LOGGABLE RESOURCES LIST	687
54.32. NETWORK METER CREATE	689
54.33. NETWORK METER DELETE	690
54.34. NETWORK METER LIST	691
54.35. NETWORK METER RULE CREATE	692
54.36. NETWORK METER RULE DELETE	694
54.37. NETWORK METER RULE LIST	694
54.38. NETWORK METER RULE SHOW	696
54.39. NETWORK METER SHOW	697
54.40. NETWORK ONBOARD SUBNETS	698
54.41. NETWORK QOS POLICY CREATE	699
54.42. NETWORK QOS POLICY DELETE	701
54.43. NETWORK QOS POLICY LIST	701
54.44. NETWORK QOS POLICY SET	703
54.45. NETWORK QOS POLICY SHOW	704
54.46. NETWORK QOS RULE CREATE	705
54.47. NETWORK QOS RULE DELETE	707
54.48. NETWORK QOS RULE LIST	707
54.49. NETWORK QOS RULE SET	709
54.50. NETWORK QOS RULE SHOW	710
54.51. NETWORK QOS RULE TYPE LIST	711
54.52. NETWORK QOS RULE TYPE SHOW	712
54.53. NETWORK RBAC CREATE	714
54.54. NETWORK RBAC DELETE	716
54.55. NETWORK RBAC LIST	716
54.56. NETWORK RBAC SET	718
54.57. NETWORK RBAC SHOW	718
54.58. NETWORK SEGMENT CREATE	719
54.59. NETWORK SEGMENT DELETE	721
54.60. NETWORK SEGMENT LIST	722
54.61. NETWORK SEGMENT RANGE CREATE	723
54.62. NETWORK SEGMENT RANGE DELETE	725
54.63. NETWORK SEGMENT RANGE LIST	725
54.64. NETWORK SEGMENT RANGE SET	727
54.65. NETWORK SEGMENT RANGE SHOW	728
54.66. NETWORK SEGMENT SET	729
54.67. NETWORK SEGMENT SHOW	730
54.68. NETWORK SERVICE PROVIDER LIST	731
54.69. NETWORK SET	732
54.70. NETWORK SHOW	734
54.71. NETWORK SUBPORT LIST	735
54.72. NETWORK TRUNK CREATE	737
54.73. NETWORK TRUNK DELETE	739
54.74. NETWORK TRUNK LIST	739
54.75. NETWORK TRUNK SET	740
54.76. NETWORK TRUNK SHOW	741
54.77. NETWORK TRUNK UNSET	742
54.78. NETWORK UNSET	743
CHAPTER 55. OBJECT	744
55.1. OBJECT CREATE	744
55.2. OBJECT DELETE	745
55.3. OBJECT LIST	746

55.4. OBJECT SAVE	747
55.5. OBJECT SET	748
55.6. OBJECT SHOW	748
55.7. OBJECT STORE ACCOUNT SET	750
55.8. OBJECT STORE ACCOUNT SHOW	750
55.9. OBJECT STORE ACCOUNT UNSET	751
55.10. OBJECT UNSET	752
CHAPTER 56. ORCHESTRATION	753
56.1. ORCHESTRATION BUILD INFO	753
56.2. ORCHESTRATION RESOURCE TYPE LIST	754
56.3. ORCHESTRATION RESOURCE TYPE SHOW	755
56.4. ORCHESTRATION SERVICE LIST	757
56.5. ORCHESTRATION TEMPLATE FUNCTION LIST	758
56.6. ORCHESTRATION TEMPLATE VALIDATE	760
56.7. ORCHESTRATION TEMPLATE VERSION LIST	761
CHAPTER 57. OVERCLOUD	763
57.1. OVERCLOUD ADMIN AUTHORIZE	763
57.2. OVERCLOUD CONFIG DOWNLOAD	763
57.3. OVERCLOUD CONTAINER IMAGE BUILD	764
57.4. OVERCLOUD CONTAINER IMAGE PREPARE	765
57.5. OVERCLOUD CONTAINER IMAGE TAG DISCOVER	767
57.6. OVERCLOUD CONTAINER IMAGE UPLOAD	767
57.7. OVERCLOUD CREDENTIALS	768
57.8. OVERCLOUD DELETE	768
57.9. OVERCLOUD DEPLOY	769
57.10. OVERCLOUD EXECUTE	774
57.11. OVERCLOUD EXTERNAL-UPDATE RUN	775
57.12. OVERCLOUD EXTERNAL-UPGRADE RUN	776
57.13. OVERCLOUD FAILURES	776
57.14. OVERCLOUD FFWD-UPGRADE CONVERGE	777
57.15. OVERCLOUD FFWD-UPGRADE PREPARE	782
57.16. OVERCLOUD FFWD-UPGRADE RUN	788
57.17. OVERCLOUD GENERATE FENCING	788
57.18. OVERCLOUD IMAGE BUILD	789
57.19. OVERCLOUD IMAGE UPLOAD	790
57.20. OVERCLOUD NETENV VALIDATE	791
57.21. OVERCLOUD NODE BIOS CONFIGURE	791
57.22. OVERCLOUD NODE BIOS RESET	792
57.23. OVERCLOUD NODE CLEAN	792
57.24. OVERCLOUD NODE CONFIGURE	793
57.25. OVERCLOUD NODE DELETE	794
57.26. OVERCLOUD NODE DISCOVER	795
57.27. OVERCLOUD NODE IMPORT	796
57.28. OVERCLOUD NODE INTROSPECT	797
57.29. OVERCLOUD NODE PROVIDE	797
57.30. OVERCLOUD NODE PROVISION	798
57.31. OVERCLOUD PARAMETERS SET	799
57.32. OVERCLOUD PLAN CREATE	799
57.33. OVERCLOUD PLAN DELETE	800
57.34. OVERCLOUD PLAN DEPLOY	800
57.35. OVERCLOUD PLAN EXPORT	801

57.36. OVERCLOUD PLAN LIST	801
57.37. OVERCLOUD PROFILES LIST	803
57.38. OVERCLOUD PROFILES MATCH	805
57.39. OVERCLOUD RAID CREATE	806
57.40. OVERCLOUD ROLE LIST	806
57.41. OVERCLOUD ROLE SHOW	807
57.42. OVERCLOUD ROLES GENERATE	807
57.43. OVERCLOUD ROLES LIST	808
57.44. OVERCLOUD ROLES SHOW	810
57.45. OVERCLOUD STATUS	811
57.46. OVERCLOUD SUPPORT REPORT COLLECT	811
57.47. OVERCLOUD UPDATE CONVERGE	812
57.48. OVERCLOUD UPDATE PREPARE	818
57.49. OVERCLOUD UPDATE RUN	823
57.50. OVERCLOUD UPGRADE CONVERGE	825
57.51. OVERCLOUD UPGRADE PREPARE	830
57.52. OVERCLOUD UPGRADE RUN	835
CHAPTER 58. POLICY	838
58.1. POLICY CREATE	838
58.2. POLICY DELETE	839
58.3. POLICY LIST	839
58.4. POLICY SET	841
58.5. POLICY SHOW	841
CHAPTER 59. PORT	844
59.1. PORT CREATE	844
59.2. PORT DELETE	847
59.3. PORT LIST	847
59.4. PORT SET	849
59.5. PORT SHOW	852
59.6. PORT UNSET	853
CHAPTER 60. PROJECT	855
60.1. PROJECT CREATE	855
60.2. PROJECT DELETE	856
60.3. PROJECT LIST	857
60.4. PROJECT PURGE	859
60.5. PROJECT SET	859
60.6. PROJECT SHOW	860
CHAPTER 61. PTR	863
61.1. PTR RECORD LIST	863
61.2. PTR RECORD SET	864
61.3. PTR RECORD SHOW	866
61.4. PTR RECORD UNSET	867
CHAPTER 62. QUOTA	869
62.1. QUOTA LIST	869
62.2. QUOTA SET	870
62.3. QUOTA SHOW	872
CHAPTER 63. RECORDSET	875
63.1. RECORDSET CREATE	875
63.2. RECORDSET DELETE	876

63.3. RECORDSET LIST	878
63.4. RECORDSET SET	880
63.5. RECORDSET SHOW	882
CHAPTER 64. REGION	884
64.1. REGION CREATE	884
64.2. REGION DELETE	885
64.3. REGION LIST	885
64.4. REGION SET	887
64.5. REGION SHOW	887
CHAPTER 65. REGISTERED	889
65.1. REGISTERED LIMIT CREATE	889
65.2. REGISTERED LIMIT DELETE	890
65.3. REGISTERED LIMIT LIST	891
65.4. REGISTERED LIMIT SET	892
65.5. REGISTERED LIMIT SHOW	894
CHAPTER 66. REQUEST	896
66.1. REQUEST TOKEN AUTHORIZE	896
66.2. REQUEST TOKEN CREATE	897
CHAPTER 67. RESOURCE	899
67.1. RESOURCE MEMBER CREATE	899
67.2. RESOURCE MEMBER DELETE	900
67.3. RESOURCE MEMBER LIST	901
67.4. RESOURCE MEMBER SHOW	903
67.5. RESOURCE MEMBER UPDATE	904
CHAPTER 68. ROLE	906
68.1. ROLE ADD	906
68.2. ROLE ASSIGNMENT LIST	907
68.3. ROLE CREATE	909
68.4. ROLE DELETE	910
68.5. ROLE LIST	911
68.6. ROLE REMOVE	913
68.7. ROLE SET	914
68.8. ROLE SHOW	914
CHAPTER 69. ROUTER	917
69.1. ROUTER ADD PORT	917
69.2. ROUTER ADD SUBNET	917
69.3. ROUTER CREATE	918
69.4. ROUTER DELETE	920
69.5. ROUTER LIST	920
69.6. ROUTER REMOVE PORT	922
69.7. ROUTER REMOVE SUBNET	923
69.8. ROUTER SET	923
69.9. ROUTER SHOW	925
69.10. ROUTER UNSET	926
CHAPTER 70. SECRET	928
70.1. SECRET CONTAINER CREATE	928
70.2. SECRET CONTAINER DELETE	929
70.3. SECRET CONTAINER GET	929

70.4. SECRET CONTAINER LIST	931
70.5. SECRET DELETE	932
70.6. SECRET GET	933
70.7. SECRET LIST	934
70.8. SECRET ORDER CREATE	936
70.9. SECRET ORDER DELETE	938
70.10. SECRET ORDER GET	938
70.11. SECRET ORDER LIST	940
70.12. SECRET STORE	941
70.13. SECRET UPDATE	943
CHAPTER 71. SECURITY	944
71.1. SECURITY GROUP CREATE	944
71.2. SECURITY GROUP DELETE	945
71.3. SECURITY GROUP LIST	946
71.4. SECURITY GROUP RULE CREATE	948
71.5. SECURITY GROUP RULE DELETE	950
71.6. SECURITY GROUP RULE LIST	950
71.7. SECURITY GROUP RULE SHOW	952
71.8. SECURITY GROUP SET	953
71.9. SECURITY GROUP SHOW	954
71.10. SECURITY GROUP UNSET	955
CHAPTER 72. SERVER	957
72.1. SERVER ADD FIXED IP	957
72.2. SERVER ADD FLOATING IP	957
72.3. SERVER ADD NETWORK	958
72.4. SERVER ADD PORT	958
72.5. SERVER ADD SECURITY GROUP	959
72.6. SERVER ADD VOLUME	959
72.7. SERVER BACKUP CREATE	960
72.8. SERVER CREATE	961
72.9. SERVER DELETE	965
72.10. SERVER DUMP CREATE	965
72.11. SERVER EVENT LIST	965
72.12. SERVER EVENT SHOW	967
72.13. SERVER GROUP CREATE	968
72.14. SERVER GROUP DELETE	970
72.15. SERVER GROUP LIST	970
72.16. SERVER GROUP SHOW	972
72.17. SERVER IMAGE CREATE	973
72.18. SERVER LIST	974
72.19. SERVER LOCK	977
72.20. SERVER MIGRATE	977
72.21. SERVER PAUSE	978
72.22. SERVER REBOOT	979
72.23. SERVER REBUILD	979
72.24. SERVER REMOVE FIXED IP	981
72.25. SERVER REMOVE FLOATING IP	981
72.26. SERVER REMOVE NETWORK	982
72.27. SERVER REMOVE PORT	982
72.28. SERVER REMOVE SECURITY GROUP	983
72.29. SERVER REMOVE VOLUME	983

72.30. SERVER RESCUE	984
72.31. SERVER RESIZE	984
72.32. SERVER RESTORE	985
72.33. SERVER RESUME	985
72.34. SERVER SET	986
72.35. SERVER SHELVE	987
72.36. SERVER SHOW	987
72.37. SERVER SSH	988
72.38. SERVER START	989
72.39. SERVER STOP	990
72.40. SERVER SUSPEND	990
72.41. SERVER UNLOCK	990
72.42. SERVER UNPAUSE	991
72.43. SERVER UNRESCUE	991
72.44. SERVER UNSET	992
72.45. SERVER UNSHELVE	992
CHAPTER 73. SERVICE	994
73.1. SERVICE CREATE	994
73.2. SERVICE DELETE	995
73.3. SERVICE LIST	996
73.4. SERVICE PROVIDER CREATE	997
73.5. SERVICE PROVIDER DELETE	998
73.6. SERVICE PROVIDER LIST	999
73.7. SERVICE PROVIDER SET	1000
73.8. SERVICE PROVIDER SHOW	1001
73.9. SERVICE SET	1002
73.10. SERVICE SHOW	1003
CHAPTER 74. SFC	1005
74.1. SFC FLOW CLASSIFIER CREATE	1005
74.2. SFC FLOW CLASSIFIER DELETE	1007
74.3. SFC FLOW CLASSIFIER LIST	1007
74.4. SFC FLOW CLASSIFIER SET	1009
74.5. SFC FLOW CLASSIFIER SHOW	1009
74.6. SFC PORT CHAIN CREATE	1010
74.7. SFC PORT CHAIN DELETE	1012
74.8. SFC PORT CHAIN LIST	1012
74.9. SFC PORT CHAIN SET	1014
74.10. SFC PORT CHAIN SHOW	1015
74.11. SFC PORT CHAIN UNSET	1016
74.12. SFC PORT PAIR CREATE	1017
74.13. SFC PORT PAIR DELETE	1018
74.14. SFC PORT PAIR GROUP CREATE	1019
74.15. SFC PORT PAIR GROUP DELETE	1021
74.16. SFC PORT PAIR GROUP LIST	1021
74.17. SFC PORT PAIR GROUP SET	1023
74.18. SFC PORT PAIR GROUP SHOW	1023
74.19. SFC PORT PAIR GROUP UNSET	1025
74.20. SFC PORT PAIR LIST	1025
74.21. SFC PORT PAIR SET	1026
74.22. SFC PORT PAIR SHOW	1027
74.23. SFC SERVICE GRAPH CREATE	1028

74.24. SFC SERVICE GRAPH DELETE	1030
74.25. SFC SERVICE GRAPH LIST	1030
74.26. SFC SERVICE GRAPH SET	1032
74.27. SFC SERVICE GRAPH SHOW	1032
CHAPTER 75. SNAPSHOT	1034
75.1. SNAPSHOT CREATE	1034
75.2. SNAPSHOT DELETE	1035
75.3. SNAPSHOT LIST	1036
75.4. SNAPSHOT SET	1037
75.5. SNAPSHOT SHOW	1038
75.6. SNAPSHOT UNSET	1039
CHAPTER 76. SOFTWARE	1041
76.1. SOFTWARE CONFIG CREATE	1041
76.2. SOFTWARE CONFIG DELETE	1042
76.3. SOFTWARE CONFIG LIST	1043
76.4. SOFTWARE CONFIG SHOW	1044
76.5. SOFTWARE DEPLOYMENT CREATE	1045
76.6. SOFTWARE DEPLOYMENT DELETE	1047
76.7. SOFTWARE DEPLOYMENT LIST	1048
76.8. SOFTWARE DEPLOYMENT METADATA SHOW	1049
76.9. SOFTWARE DEPLOYMENT OUTPUT SHOW	1050
76.10. SOFTWARE DEPLOYMENT SHOW	1050
CHAPTER 77. STACK	1052
77.1. STACK ABANDON	1052
77.2. STACK ADOPT	1053
77.3. STACK CANCEL	1055
77.4. STACK CHECK	1056
77.5. STACK CREATE	1058
77.6. STACK DELETE	1060
77.7. STACK ENVIRONMENT SHOW	1060
77.8. STACK EVENT LIST	1062
77.9. STACK EVENT SHOW	1064
77.10. STACK EXPORT	1065
77.11. STACK FAILURES LIST	1067
77.12. STACK FILE LIST	1067
77.13. STACK HOOK CLEAR	1068
77.14. STACK HOOK POLL	1069
77.15. STACK LIST	1071
77.16. STACK OUTPUT LIST	1073
77.17. STACK OUTPUT SHOW	1074
77.18. STACK RESOURCE LIST	1076
77.19. STACK RESOURCE MARK UNHEALTHY	1077
77.20. STACK RESOURCE METADATA	1078
77.21. STACK RESOURCE SHOW	1079
77.22. STACK RESOURCE SIGNAL	1081
77.23. STACK RESUME	1081
77.24. STACK SHOW	1083
77.25. STACK SNAPSHOT CREATE	1084
77.26. STACK SNAPSHOT DELETE	1085
77.27. STACK SNAPSHOT LIST	1086
77.28. STACK SNAPSHOT RESTORE	1087

77.29. STACK SNAPSHOT SHOW	1088
77.30. STACK SUSPEND	1089
77.31. STACK TEMPLATE SHOW	1091
77.32. STACK UPDATE	1092
CHAPTER 78. SUBNET	1096
78.1. SUBNET CREATE	1096
78.2. SUBNET DELETE	1099
78.3. SUBNET LIST	1099
78.4. SUBNET POOL CREATE	1101
78.5. SUBNET POOL DELETE	1104
78.6. SUBNET POOL LIST	1104
78.7. SUBNET POOL SET	1107
78.8. SUBNET POOL SHOW	1108
78.9. SUBNET POOL UNSET	1109
78.10. SUBNET SET	1110
78.11. SUBNET SHOW	1112
78.12. SUBNET UNSET	1113
CHAPTER 79. TASK	1115
79.1. TASK EXECUTION LIST	1115
79.2. TASK EXECUTION PUBLISHED SHOW	1117
79.3. TASK EXECUTION RERUN	1117
79.4. TASK EXECUTION RESULT SHOW	1118
79.5. TASK EXECUTION SHOW	1119
CHAPTER 80. TLD	1121
80.1. TLD CREATE	1121
80.2. TLD DELETE	1122
80.3. TLD LIST	1123
80.4. TLD SET	1124
80.5. TLD SHOW	1126
CHAPTER 81. TOKEN	1128
81.1. TOKEN ISSUE	1128
81.2. TOKEN REVOKE	1129
CHAPTER 82. TRIPLEO	1130
82.1. TRIPLEO CONFIG GENERATE ANSIBLE	1130
82.2. TRIPLEO CONTAINER IMAGE PREPARE DEFAULT	1130
82.3. TRIPLEO CONTAINER IMAGE PREPARE	1130
82.4. TRIPLEO DEPLOY	1131
82.5. TRIPLEO UPGRADE	1134
82.6. TRIPLEO VALIDATOR GROUP INFO	1137
82.7. TRIPLEO VALIDATOR LIST	1139
82.8. TRIPLEO VALIDATOR RUN	1140
82.9. TRIPLEO VALIDATOR SHOW PARAMETER	1141
82.10. TRIPLEO VALIDATOR SHOW	1142
CHAPTER 83. TRUST	1144
83.1. TRUST CREATE	1144
83.2. TRUST DELETE	1145
83.3. TRUST LIST	1146
83.4. TRUST SHOW	1147

CHAPTER 84. TSIGKEY	1149
84.1. TSIGKEY CREATE	1149
84.2. TSIGKEY DELETE	1150
84.3. TSIGKEY LIST	1151
84.4. TSIGKEY SET	1152
84.5. TSIGKEY SHOW	1154
CHAPTER 85. UNDERCLOUD	1156
85.1. UNDERCLOUD BACKUP	1156
85.2. UNDERCLOUD DEPLOY	1156
85.3. UNDERCLOUD INSTALL	1159
85.4. UNDERCLOUD UPGRADE	1160
CHAPTER 86. USAGE	1161
86.1. USAGE LIST	1161
86.2. USAGE SHOW	1162
CHAPTER 87. USER	1164
87.1. USER CREATE	1164
87.2. USER DELETE	1166
87.3. USER LIST	1166
87.4. USER PASSWORD SET	1167
87.5. USER SET	1168
87.6. USER SHOW	1169
CHAPTER 88. VERSIONS	1171
88.1. VERSIONS SHOW	1171
CHAPTER 89. VOLUME	1173
89.1. VOLUME BACKEND CAPABILITY SHOW	1173
89.2. VOLUME BACKEND POOL LIST	1174
89.3. VOLUME BACKUP CREATE	1175
89.4. VOLUME BACKUP DELETE	1177
89.5. VOLUME BACKUP LIST	1177
89.6. VOLUME BACKUP RECORD EXPORT	1179
89.7. VOLUME BACKUP RECORD IMPORT	1180
89.8. VOLUME BACKUP RESTORE	1182
89.9. VOLUME BACKUP SET	1183
89.10. VOLUME BACKUP SHOW	1184
89.11. VOLUME CREATE	1185
89.12. VOLUME DELETE	1187
89.13. VOLUME HOST FAILOVER	1188
89.14. VOLUME HOST SET	1188
89.15. VOLUME LIST	1189
89.16. VOLUME MIGRATE	1191
89.17. VOLUME QOS ASSOCIATE	1191
89.18. VOLUME QOS CREATE	1192
89.19. VOLUME QOS DELETE	1193
89.20. VOLUME QOS DISASSOCIATE	1194
89.21. VOLUME QOS LIST	1194
89.22. VOLUME QOS SET	1196
89.23. VOLUME QOS SHOW	1196
89.24. VOLUME QOS UNSET	1198
89.25. VOLUME SERVICE LIST	1198

89.26. VOLUME SERVICE SET	1199
89.27. VOLUME SET	1200
89.28. VOLUME SHOW	1202
89.29. VOLUME SNAPSHOT CREATE	1203
89.30. VOLUME SNAPSHOT DELETE	1205
89.31. VOLUME SNAPSHOT LIST	1205
89.32. VOLUME SNAPSHOT SET	1207
89.33. VOLUME SNAPSHOT SHOW	1208
89.34. VOLUME SNAPSHOT UNSET	1209
89.35. VOLUME TRANSFER REQUEST ACCEPT	1210
89.36. VOLUME TRANSFER REQUEST CREATE	1211
89.37. VOLUME TRANSFER REQUEST DELETE	1213
89.38. VOLUME TRANSFER REQUEST LIST	1213
89.39. VOLUME TRANSFER REQUEST SHOW	1215
89.40. VOLUME TYPE CREATE	1216
89.41. VOLUME TYPE DELETE	1218
89.42. VOLUME TYPE LIST	1219
89.43. VOLUME TYPE SET	1220
89.44. VOLUME TYPE SHOW	1222
89.45. VOLUME TYPE UNSET	1223
89.46. VOLUME UNSET	1224
CHAPTER 90. WORKBOOK	1225
90.1. WORKBOOK CREATE	1225
90.2. WORKBOOK DEFINITION SHOW	1226
90.3. WORKBOOK DELETE	1226
90.4. WORKBOOK LIST	1227
90.5. WORKBOOK SHOW	1229
90.6. WORKBOOK UPDATE	1230
90.7. WORKBOOK VALIDATE	1231
CHAPTER 91. WORKFLOW	1234
91.1. WORKFLOW CREATE	1234
91.2. WORKFLOW DEFINITION SHOW	1236
91.3. WORKFLOW DELETE	1236
91.4. WORKFLOW ENGINE SERVICE LIST	1236
91.5. WORKFLOW ENV CREATE	1238
91.6. WORKFLOW ENV DELETE	1240
91.7. WORKFLOW ENV LIST	1240
91.8. WORKFLOW ENV SHOW	1242
91.9. WORKFLOW ENV UPDATE	1243
91.10. WORKFLOW EXECUTION CREATE	1244
91.11. WORKFLOW EXECUTION DELETE	1246
91.12. WORKFLOW EXECUTION INPUT SHOW	1247
91.13. WORKFLOW EXECUTION LIST	1247
91.14. WORKFLOW EXECUTION OUTPUT SHOW	1249
91.15. WORKFLOW EXECUTION SHOW	1249
91.16. WORKFLOW EXECUTION UPDATE	1251
91.17. WORKFLOW LIST	1252
91.18. WORKFLOW SHOW	1254
91.19. WORKFLOW UPDATE	1255
91.20. WORKFLOW VALIDATE	1257
CHAPTER 92. ZONE	1259

92.1. ZONE ABANDON	1259
92.2. ZONE AXFR	1259
92.3. ZONE BLACKLIST CREATE	1260
92.4. ZONE BLACKLIST DELETE	1261
92.5. ZONE BLACKLIST LIST	1262
92.6. ZONE BLACKLIST SET	1263
92.7. ZONE BLACKLIST SHOW	1265
92.8. ZONE CREATE	1266
92.9. ZONE DELETE	1268
92.10. ZONE EXPORT CREATE	1270
92.11. ZONE EXPORT DELETE	1271
92.12. ZONE EXPORT LIST	1272
92.13. ZONE EXPORT SHOW	1273
92.14. ZONE EXPORT SHOWFILE	1275
92.15. ZONE IMPORT CREATE	1276
92.16. ZONE IMPORT DELETE	1278
92.17. ZONE IMPORT LIST	1278
92.18. ZONE IMPORT SHOW	1280
92.19. ZONE LIST	1281
92.20. ZONE SET	1283
92.21. ZONE SHOW	1285
92.22. ZONE TRANSFER ACCEPT LIST	1286
92.23. ZONE TRANSFER ACCEPT REQUEST	1288
92.24. ZONE TRANSFER ACCEPT SHOW	1289
92.25. ZONE TRANSFER REQUEST CREATE	1291
92.26. ZONE TRANSFER REQUEST DELETE	1293
92.27. ZONE TRANSFER REQUEST LIST	1293
92.28. ZONE TRANSFER REQUEST SET	1295
92.29. ZONE TRANSFER REQUEST SHOW	1296

PREFACE

A reference to the commands available for the unified OpenStack command-line client.

CHAPTER 1. THE OPENSTACK CLIENT

The **openstack** client is a common OpenStack command-line interface (CLI). This chapter documents the main options for **openstack** version 3.18.1. :leveloffset: +1

Command-line interface to the OpenStack APIs

Usage:

```
openstack [--version] [-v | -q] [--log-file LOG_FILE] [-h] [--debug]
  [--os-cloud <cloud-config-name>]
  [--os-region-name <auth-region-name>]
  [--os-cacert <ca-bundle-file>] [--os-cert <certificate-file>]
  [--os-key <key-file>] [--verify | --insecure]
  [--os-default-domain <auth-domain>]
  [--os-interface <interface>]
  [--os-service-provider <service_provider>]
  [--os-remote-project-name <remote_project_name> | --os-remote-project-id
  <remote_project_id>]
  [--os-remote-project-domain-name <remote_project_domain_name> | --os-remote-project-
  domain-id <remote_project_domain_id>]
  [--timing] [--os-beta-command] [--os-profile hmac-key]
  [--os-compute-api-version <compute-api-version>]
  [--os-identity-api-version <identity-api-version>]
  [--os-image-api-version <image-api-version>]
  [--os-network-api-version <network-api-version>]
  [--os-object-api-version <object-api-version>]
  [--os-volume-api-version <volume-api-version>]
  [--os-queues-api-version <queues-api-version>]
  [--os-database-api-version <database-api-version>]
  [--os-tripleoclient-api-version <tripleoclient-api-version>]
  [--os-data-processing-api-version <data-processing-api-version>]
  [--os-data-processing-url OS_DATA_PROCESSING_URL]
  [--os-loadbalancer-api-version <loadbalancer-api-version>]
  [--os-workflow-api-version <workflow-api-version>]
  [--os-container-infra-api-version <container-infra-api-version>]
  [--os-baremetal-api-version <baremetal-api-version>]
  [--inspector-api-version INSPECTOR_API_VERSION]
  [--inspector-url INSPECTOR_URL]
  [--os-orchestration-api-version <orchestration-api-version>]
  [--os-dns-api-version <dns-api-version>]
  [--os-key-manager-api-version <key-manager-api-version>]
  [--os-metrics-api-version <metrics-api-version>]
  [--os-alarms-api-version <alarms-api-version>]
  [--os-auth-type <auth-type>] [--os-auth-url <auth-auth-url>]
  [--os-system-scope <auth-system-scope>]
  [--os-domain-id <auth-domain-id>]
  [--os-domain-name <auth-domain-name>]
  [--os-project-id <auth-project-id>]
  [--os-project-name <auth-project-name>]
  [--os-project-domain-id <auth-project-domain-id>]
  [--os-project-domain-name <auth-project-domain-name>]
  [--os-trust-id <auth-trust-id>]
  [--os-identity-provider <auth-identity-provider>]
  [--os-protocol <auth-protocol>]
  [--os-client-id <auth-client-id>]
```

```

[--os-client-secret <auth-client-secret>]
[--os-openid-scope <auth-openid-scope>]
[--os-access-token-endpoint <auth-access-token-endpoint>]
[--os-discovery-endpoint <auth-discovery-endpoint>]
[--os-access-token-type <auth-access-token-type>]
[--os-username <auth-username>]
[--os-password <auth-password>]
[--os-endpoint <auth-endpoint>] [--os-token <auth-token>]
[--os-default-domain-id <auth-default-domain-id>]
[--os-default-domain-name <auth-default-domain-name>]
[--os-user-id <auth-user-id>]
[--os-user-domain-id <auth-user-domain-id>]
[--os-user-domain-name <auth-user-domain-name>]
[--os-passcode <auth-passcode>] [--os-user <auth-user>]
[--os-consumer-key <auth-consumer-key>]
[--os-consumer-secret <auth-consumer-secret>]
[--os-access-key <auth-access-key>]
[--os-access-secret <auth-access-secret>]
[--os-roles <auth-roles>]
[--os-application-credential-secret <auth-application-credential-secret>]
[--os-application-credential-id <auth-application-credential-id>]
[--os-application-credential-name <auth-application-credential-name>]
[--os-aodh-endpoint <auth-aodh-endpoint>]
[--os-redirect-uri <auth-redirect-uri>]
[--os-code <auth-code>]
[--os-identity-provider-url <auth-identity-provider-url>]
[--os-service-provider-endpoint <auth-service-provider-endpoint>]
[--os-service-provider-entity-id <auth-service-provider-entity-id>]
[--os-url <auth-url>] [--os-access-token <auth-access-token>]

```

Table 1.1. Optional Arguments

Value	Summary
--version	Show program's version number and exit
-v, --verbose	Increase verbosity of output. can be repeated.
-q, --quiet	Suppress output except warnings and errors.
--log-file LOG_FILE	Specify a file to log output. disabled by default.
-h, --help	Show help message and exit.
--debug	Show tracebacks on errors.
--os-cloud <cloud-config-name>	Cloud name in clouds.yaml (env: os_cloud)
--os-region-name <auth-region-name>	Authentication region name (env: os_region_name)
--os-cacert <ca-bundle-file>	Ca certificate bundle file (env: os_cacert)

Value	Summary
<code>--os-cert <certificate-file></code>	Client certificate bundle file (env: <code>os_cert</code>)
<code>--os-key <key-file></code>	Client certificate key file (env: <code>os_key</code>)
<code>--verify</code>	Verify server certificate (default)
<code>--insecure</code>	Disable server certificate verification
<code>--os-default-domain <auth-domain></code>	Default domain id, default=default. (env: <code>OS_DEFAULT_DOMAIN</code>)
<code>--os-interface <interface></code>	Select an interface type. valid interface types: [admin, public, internal]. default=public, (Env: <code>OS_INTERFACE</code>)
<code>--os-service-provider <service_provider></code>	Authenticate with and perform the command on a service provider using Keystone-to-keystone federation. Must also specify the remote project option.
<code>--os-remote-project-name <remote_project_name></code>	Project name when authenticating to a service provider if using Keystone-to-Keystone federation.
<code>--os-remote-project-id <remote_project_id></code>	Project id when authenticating to a service provider if using Keystone-to-Keystone federation.
<code>--os-remote-project-domain-name <remote_project_domain_name></code>	Domain name of the project when authenticating to a service provider if using Keystone-to-Keystone federation.
<code>--os-remote-project-domain-id <remote_project_domain_id></code>	Domain id of the project when authenticating to a service provider if using Keystone-to-Keystone federation.
<code>--timing</code>	Print api call timing info
<code>--os-beta-command</code>	Enable beta commands which are subject to change
<code>--os-profile hmac-key</code>	Hmac key for encrypting profiling context data
<code>--os-compute-api-version <compute-api-version></code>	Compute api version, default=2.1 (env: <code>OS_COMPUTE_API_VERSION</code>)
<code>--os-identity-api-version <identity-api-version></code>	Identity api version, default=3 (env: <code>OS_IDENTITY_API_VERSION</code>)

Value	Summary
<code>--os-image-api-version <image-api-version></code>	Image api version, default=2 (env: OS_IMAGE_API_VERSION)
<code>--os-network-api-version <network-api-version></code>	Network api version, default=2.0 (env: OS_NETWORK_API_VERSION)
<code>--os-object-api-version <object-api-version></code>	Object api version, default=1 (env: OS_OBJECT_API_VERSION)
<code>--os-volume-api-version <volume-api-version></code>	Volume api version, default=2 (env: OS_VOLUME_API_VERSION)
<code>--os-queues-api-version <queues-api-version></code>	Queues api version, default=2 (env: OS_QUEUES_API_VERSION)
<code>--os-database-api-version <database-api-version></code>	Database api version, default=1 (env: OS_DATABASE_API_VERSION)
<code>--os-tripleoclient-api-version <tripleoclient-api-version></code>	Tripleo client api version, default=1 (env: OS_TRIPLEOCLIENT_API_VERSION)
<code>--os-data-processing-api-version <data-processing-api-version></code>	Data processing api version, default=1.1 (env: OS_DATA_PROCESSING_API_VERSION)
<code>--os-data-processing-url OS_DATA_PROCESSING_URL</code>	Data processing api url, (env: OS_DATA_PROCESSING_API_URL)
<code>--os-loadbalancer-api-version <loadbalancer-api-version></code>	Osc plugin api version, default=2.0 (env: OS_LOADBALANCER_API_VERSION)
<code>--os-workflow-api-version <workflow-api-version></code>	Workflow api version, default=2 (env: OS_WORKFLOW_API_VERSION)
<code>--os-container-infra-api-version <container-infra-api-version></code>	Container-infra api version, default=1 (env: OS_CONTAINER_INFRA_API_VERSION)
<code>--os-baremetal-api-version <baremetal-api-version></code>	Bare metal api version, default="latest" (the maximum version supported by both the client and the server). (Env: OS_BAREMETAL_API_VERSION)
<code>--inspector-api-version INSPECTOR_API_VERSION</code>	Inspector api version, only 1 is supported now (env: INSPECTOR_VERSION).
<code>--inspector-url INSPECTOR_URL</code>	Inspector url, defaults to localhost (env: INSPECTOR_URL).

Value	Summary
<code>--os-orchestration-api-version <orchestration-api-version></code>	Orchestration api version, default=1 (env: OS_ORCHESTRATION_API_VERSION)
<code>--os-dns-api-version <dns-api-version></code>	Dns api version, default=2 (env: os_dns_api_version)
<code>--os-key-manager-api-version <key-manager-api-version></code>	Barbican api version, default=1 (env: OS_KEY_MANAGER_API_VERSION)
<code>--os-metrics-api-version <metrics-api-version></code>	Metrics api version, default=1 (env: OS_METRICS_API_VERSION)
<code>--os-alarming-api-version <alarming-api-version></code>	Queues api version, default=2 (env: OS_ALARMING_API_VERSION)
<code>--os-auth-type <auth-type></code>	Select an authentication type. available types: v3oidcpassword, admin_token, password, v3totp, noauth, none, v3oidcclientcredentials, gnocchi-basic, v3oauth1, v3tokenlessauth, v3token, gnocchi-noauth, v3applicationcredential, aodh-noauth, v2password, v3password, v2token, v3oidcauthcode, v3adfspassword, v3samlpassword, token_endpoint, v1password, token, v3oidcaccessstoken. Default: selected based on --os- username/--os-token (Env: OS_AUTH_TYPE)
<code>--os-auth-url <auth-auth-url></code>	With v3oidcpassword: authentication url with password: Authentication URL With v3totp: Authentication URL With v3oidcclientcredentials: Authentication URL With v3oauth1: Authentication URL With v3tokenlessauth: Authentication URL With v3token: Authentication URL With v3applicationcredential: Authentication URL With v2password: Authentication URL With v3password: Authentication URL With v2token: Authentication URL With v3oidcauthcode: Authentication URL With v3adfspassword: Authentication URL With v3samlpassword: Authentication URL With v1password: Authentication URL With token: Authentication URL With v3oidcaccessstoken: Authentication URL (Env: OS_AUTH_URL)

Value	Summary
--os-system-scope <auth-system-scope>	<p>With v3oidcpassword: scope for system operations with password: Scope for system operations With v3totp: Scope for system operations With v3oidcclientcredentials: Scope for system operations With v3token: Scope for system operations With v3applicationcredential: Scope for system operations With v3password: Scope for system operations With v3oidcauthcode: Scope for system operations With v3adfspassword: Scope for system operations With v3samlpassword: Scope for system operations With token: Scope for system operations With v3oidcaccessstoken: Scope for system operations (Env: OS_SYSTEM_SCOPE)</p>
--os-domain-id <auth-domain-id>	<p>With v3oidcpassword: domain id to scope to with password: Domain ID to scope to With v3totp: Domain ID to scope to With v3oidcclientcredentials: Domain ID to scope to With v3tokenlessauth: Domain ID to scope to With v3token: Domain ID to scope to With v3applicationcredential: Domain ID to scope to With v3password: Domain ID to scope to With v3oidcauthcode: Domain ID to scope to With v3adfspassword: Domain ID to scope to With v3samlpassword: Domain ID to scope to With token: Domain ID to scope to With v3oidcaccessstoken: Domain ID to scope to (Env: OS_DOMAIN_ID)</p>
--os-domain-name <auth-domain-name>	<p>With v3oidcpassword: domain name to scope to with password: Domain name to scope to With v3totp: Domain name to scope to With v3oidcclientcredentials: Domain name to scope to With v3tokenlessauth: Domain name to scope to With v3token: Domain name to scope to With v3applicationcredential: Domain name to scope to With v3password: Domain name to scope to With v3oidcauthcode: Domain name to scope to With v3adfspassword: Domain name to scope to With v3samlpassword: Domain name to scope to With token: Domain name to scope to With v3oidcaccessstoken: Domain name to scope to (Env: OS_DOMAIN_NAME)</p>

Value	Summary
--os-project-id <auth-project-id>	<p>With v3oidcpassword: project id to scope to with password: Project ID to scope to With v3totp: Project ID to scope to With noauth: Project ID With v3oidcclientcredentials: Project ID to scope to With v3tokenlessauth: Project ID to scope to With v3token: Project ID to scope to With gnocchi-noauth: Project ID With v3applicationcredential: Project ID to scope to With aodh-noauth: Project ID With v3password: Project ID to scope to With v3oidcauthcode: Project ID to scope to With v3adfspassword: Project ID to scope to With v3samlpassword: Project ID to scope to With token: Project ID to scope to With v3oidcacesstoken: Project ID to scope to (Env: OS_PROJECT_ID)</p>
--os-project-name <auth-project-name>	<p>With v3oidcpassword: project name to scope to with password: Project name to scope to With v3totp: Project name to scope to With v3oidcclientcredentials: Project name to scope to With v3tokenlessauth: Project name to scope to With v3token: Project name to scope to With v3applicationcredential: Project name to scope to With v3password: Project name to scope to With v3oidcauthcode: Project name to scope to With v3adfspassword: Project name to scope to With v3samlpassword: Project name to scope to With v1password: Swift account to use With token: Project name to scope to With v3oidcacesstoken: Project name to scope to (Env: OS_PROJECT_NAME)</p>
--os-project-domain-id <auth-project-domain-id>	<p>With v3oidcpassword: domain id containing project with password: Domain ID containing project With v3totp: Domain ID containing project With v3oidcclientcredentials: Domain ID containing project With v3tokenlessauth: Domain ID containing project With v3token: Domain ID containing project With v3applicationcredential: Domain ID containing project With v3password: Domain ID containing project With v3oidcauthcode: Domain ID containing project With v3adfspassword: Domain ID containing project With v3samlpassword: Domain ID containing project With token: Domain ID containing project With v3oidcacesstoken: Domain ID containing project (Env: OS_PROJECT_DOMAIN_ID)</p>

Value	Summary
<p><code>--os-project-domain-name <auth-project-domain-name></code></p>	<p>With v3oidcpassword: domain name containing project With password: Domain name containing project With v3totp: Domain name containing project With v3oidcclientcredentials: Domain name containing project With v3tokenlessauth: Domain name containing project With v3token: Domain name containing project With v3applicationcredential: Domain name containing project With v3password: Domain name containing project With v3oidcauthcode: Domain name containing project With v3adfspassword: Domain name containing project With v3samlpassword: Domain name containing project With token: Domain name containing project With v3oidcacesstoken: Domain name containing project (Env: OS_PROJECT_DOMAIN_NAME)</p>
<p><code>--os-trust-id <auth-trust-id></code></p>	<p>With v3oidcpassword: trust id with password: trust id With v3totp: Trust ID With v3oidcclientcredentials: Trust ID With v3token: Trust ID With v3applicationcredential: Trust ID With v2password: Trust ID With v3password: Trust ID With v2token: Trust ID With v3oidcauthcode: Trust ID With v3adfspassword: Trust ID With v3samlpassword: Trust ID With token: Trust ID With v3oidcacesstoken: Trust ID (Env: OS_TRUST_ID)</p>
<p><code>--os-identity-provider <auth-identity-provider></code></p>	<p>With v3oidcpassword: identity provider's name with v3oidcclientcredentials: Identity Provider's name With v3oidcauthcode: Identity Provider's name With v3adfspassword: Identity Provider's name With v3samlpassword: Identity Provider's name With v3oidcacesstoken: Identity Provider's name (Env: OS_IDENTITY_PROVIDER)</p>
<p><code>--os-protocol <auth-protocol></code></p>	<p>With v3oidcpassword: protocol for federated plugin With v3oidcclientcredentials: Protocol for federated plugin With v3oidcauthcode: Protocol for federated plugin With v3adfspassword: Protocol for federated plugin With v3samlpassword: Protocol for federated plugin With v3oidcacesstoken: Protocol for federated plugin (Env: OS_PROTOCOL)</p>
<p><code>--os-client-id <auth-client-id></code></p>	<p>With v3oidcpassword: oauth 2.0 client id with v3oidcclientcredentials: OAuth 2.0 Client ID With v3oidcauthcode: OAuth 2.0 Client ID (Env: OS_CLIENT_ID)</p>

Value	Summary
--os-client-secret <auth-client-secret>	<p>With v3oidcpassword: oauth 2.0 client secret with</p> <p>v3oidcclientcredentials: OAuth 2.0 Client Secret</p> <p>With v3oidcauthcode: OAuth 2.0 Client Secret (Env: OS_CLIENT_SECRET)</p>
--os-openid-scope <auth-openid-scope>	<p>With v3oidcpassword: openid connect scope that is requested from authorization server. Note that the OpenID Connect specification states that "openid" must be always specified. With</p> <p>v3oidcclientcredentials: OpenID Connect scope that is requested from authorization server. Note that the OpenID Connect specification states that "openid" must be always specified. With v3oidcauthcode:</p> <p>OpenID Connect scope that is requested from authorization server. Note that the OpenID Connect specification states that "openid" must be always specified. (Env: OS_OPENID_SCOPE)</p>
--os-access-token-endpoint <auth-access-token-endpoint>	<p>With v3oidcpassword: openid connect provider token Endpoint. Note that if a discovery document is being passed this option will override the endpoint provided by the server in the discovery document. With</p> <p>v3oidcclientcredentials: OpenID Connect Provider Token Endpoint. Note that if a discovery document is being passed this option will override the endpoint provided by the server in the discovery document. With v3oidcauthcode: OpenID Connect Provider Token Endpoint. Note that if a discovery document is being passed this option will override the endpoint provided by the server in the discovery document. (Env: OS_ACCESS_TOKEN_ENDPOINT)</p>
--os-discovery-endpoint <auth-discovery-endpoint>	<p>With v3oidcpassword: openid connect discovery document URL. The discovery document will be used to obtain the values of the access token endpoint and the authentication endpoint. This URL should look like https://idp.example.org/.well-known/openid-configuration With</p> <p>v3oidcclientcredentials: OpenID Connect Discovery Document URL. The discovery document will be used to obtain the values of the access token endpoint and the authentication endpoint. This URL should look like https://idp.example.org/.well-known/openid-configuration With v3oidcauthcode:</p> <p>OpenID Connect Discovery Document URL. The discovery document will be used to obtain the values of the access token endpoint and the authentication endpoint. This URL should look like https://idp.example.org/.well-known/openid-configuration (Env: OS_DISCOVERY_ENDPOINT)</p>

Value	Summary
--os-access-token-type <auth-access-token-type>	With v3oidcpassword: oauth 2.0 authorization server Introspection token type, it is used to decide which type of token will be used when processing token introspection. Valid values are: "access_token" or "id_token" With v3oidcclientcredentials: OAuth 2.0 Authorization Server Introspection token type, it is used to decide which type of token will be used when processing token introspection. Valid values are: "access_token" or "id_token" With v3oidcauthcode: OAuth 2.0 Authorization Server Introspection token type, it is used to decide which type of token will be used when processing token introspection. Valid values are: "access_token" or "id_token" (Env: OS_ACCESS_TOKEN_TYPE)
--os-username <auth-username>	With v3oidcpassword: username with password: username With v3totp: Username With v3applicationcredential: Username With v2password: Username to login with With v3password: Username With v3adfspassword: Username With v3samlpasword: Username With v1password: Username to login with (Env: OS_USERNAME)
--os-password <auth-password>	With v3oidcpassword: password with password: user's password With v2password: Password to use With v3password: User's password With v3adfspassword: Password With v3samlpasword: Password With v1password: Password to use (Env: OS_PASSWORD)
--os-endpoint <auth-endpoint>	With admin_token: the endpoint that will always be used With noauth: Cinder endpoint With none: The endpoint that will always be used With gnocchi-basic: Gnocchi endpoint With gnocchi-noauth: Gnocchi endpoint (Env: OS_ENDPOINT)
--os-token <auth-token>	With admin_token: the token that will always be used With v3token: Token to authenticate with With v2token: Token With token_endpoint: Authentication token to use With token: Token to authenticate with (Env: OS_TOKEN)
--os-default-domain-id <auth-default-domain-id>	With password: optional domain id to use with v3 and v2 parameters. It will be used for both the user and project domain in v3 and ignored in v2 authentication. With token: Optional domain ID to use with v3 and v2 parameters. It will be used for both the user and project domain in v3 and ignored in v2 authentication. (Env: OS_DEFAULT_DOMAIN_ID)

Value	Summary
<code>--os-default-domain-name <auth-default-domain-name></code>	With password: optional domain name to use with v3 api and v2 parameters. It will be used for both the user and project domain in v3 and ignored in v2 authentication. With token: Optional domain name to use with v3 API and v2 parameters. It will be used for both the user and project domain in v3 and ignored in v2 authentication. (Env: OS_DEFAULT_DOMAIN_NAME)
<code>--os-user-id <auth-user-id></code>	With password: user id with v3totp: user id with noauth: User ID With gnocchi-noauth: User ID With v3applicationcredential: User ID With aodh-noauth: User ID With v2password: User ID to login with With v3password: User ID (Env: OS_USER_ID)
<code>--os-user-domain-id <auth-user-domain-id></code>	With password: user's domain id with v3totp: user's domain id With v3applicationcredential: User's domain id With v3password: User's domain id (Env: OS_USER_DOMAIN_ID)
<code>--os-user-domain-name <auth-user-domain-name></code>	With password: user's domain name with v3totp: user's domain name With v3applicationcredential: User's domain name With v3password: User's domain name (Env: OS_USER_DOMAIN_NAME)
<code>--os-passcode <auth-passcode></code>	With v3totp: user's totp passcode (env: os_passcode)
<code>--os-user <auth-user></code>	With gnocchi-basic: user (env: os_user)
<code>--os-consumer-key <auth-consumer-key></code>	With v3oauth1: oauth consumer id/key (env: OS_CONSUMER_KEY)
<code>--os-consumer-secret <auth-consumer-secret></code>	With v3oauth1: oauth consumer secret (env: OS_CONSUMER_SECRET)
<code>--os-access-key <auth-access-key></code>	With v3oauth1: oauth access key (env: os_access_key)
<code>--os-access-secret <auth-access-secret></code>	With v3oauth1: oauth access secret (env: OS_ACCESS_SECRET)
<code>--os-roles <auth-roles></code>	With gnocchi-noauth: roles with aodh-noauth: roles (Env: OS_ROLES)
<code>--os-application-credential-secret <auth-application-credential-secret></code>	With v3applicationcredential: application credential auth secret (Env: OS_APPLICATION_CREDENTIAL_SECRET)

Value	Summary
<code>--os-application-credential-id <auth-application-credential-id></code>	With <code>v3applicationcredential</code> : application credential ID (Env: <code>OS_APPLICATION_CREDENTIAL_ID</code>)
<code>--os-application-credential-name <auth-application-credential-name></code>	With <code>v3applicationcredential</code> : application credential name (Env: <code>OS_APPLICATION_CREDENTIAL_NAME</code>)
<code>--os-aodh-endpoint <auth-aodh-endpoint></code>	With <code>aodh-noauth</code> : aodh endpoint (env: <code>OS_AODH_ENDPOINT</code>)
<code>--os-redirect-uri <auth-redirect-uri></code>	With <code>v3oidcauthcode</code> : openid connect redirect url (env: <code>OS_REDIRECT_URI</code>)
<code>--os-code <auth-code></code>	With <code>v3oidcauthcode</code> : oauth 2.0 authorization code (Env: <code>OS_CODE</code>)
<code>--os-identity-provider-url <auth-identity-provider-url></code>	With <code>v3adfspassword</code> : an identity provider url, where the SAML authentication request will be sent. With <code>v3samlpassword</code> : An Identity Provider URL, where the SAML2 authentication request will be sent. (Env: <code>OS_IDENTITY_PROVIDER_URL</code>)
<code>--os-service-provider-endpoint <auth-service-provider-endpoint></code>	With <code>v3adfspassword</code> : service provider's endpoint (env: <code>OS_SERVICE_PROVIDER_ENDPOINT</code>)
<code>--os-service-provider-entity-id <auth-service-provider-entity-id></code>	With <code>v3adfspassword</code> : service provider's saml entity id (Env: <code>OS_SERVICE_PROVIDER_ENTITY_ID</code>)
<code>--os-url <auth-url></code>	With <code>token_endpoint</code> : specific service endpoint to use (Env: <code>OS_URL</code>)
<code>--os-access-token <auth-access-token></code>	With <code>v3oidcaccess token</code> : oauth 2.0 access token (env: <code>OS_ACCESS_TOKEN</code>)

CHAPTER 2. ACCESS

This chapter describes the commands under the **access** command.

2.1. ACCESS TOKEN CREATE

Create an access token

Usage:

```
openstack access token create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             --consumer-key <consumer-key>
                             --consumer-secret <consumer-secret>
                             --request-key <request-key>
                             --request-secret <request-secret>
                             --verifier <verifier>
```

Table 2.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--consumer-key <consumer-key>	Consumer key (required)
--consumer-secret <consumer-secret>	Consumer secret (required)
--request-key <request-key>	Request token to exchange for access token (required)
--request-secret <request-secret>	Secret associated with <request-key> (required)
--verifier <verifier>	Verifier associated with <request-key> (required)

Table 2.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 2.3. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 2.4. Shell Formatter

Value	Summary
<code>a</code> format a UNIX shell can parse (<code>variable="value"</code>) <code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 2.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 3. ACL

This chapter describes the commands under the **acl** command.

3.1. ACL DELETE

Delete ACLs for a secret or container as identified by its href.

Usage:

```
openstack acl delete [-h] URI
```

Table 3.1. Positional Arguments

Value	Summary
URI	The uri reference for the secret or container.

Table 3.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

3.2. ACL GET

Retrieve ACLs for a secret or container by providing its href.

Usage:

```
openstack acl get [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
  [--quote {all,minimal,none,nonnumeric}] [--noindent]
  [--max-width <integer>] [--fit-width] [--print-empty]
  [--sort-column SORT_COLUMN]
  URI
```

Table 3.3. Positional Arguments

Value	Summary
URI	The uri reference for the secret or container.

Table 3.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 3.5. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 3.6. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 3.7. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 3.8. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

3.3. ACL SUBMIT

Submit ACL on a secret or container as identified by its href.

Usage:

```
openstack acl submit [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
```

```

[--noindent] [--max-width <integer>] [--fit-width]
[--print-empty] [--sort-column SORT_COLUMN]
[--user [USERS]]
[--project-access | --no-project-access]
[--operation-type {read}]
URI

```

Table 3.9. Positional Arguments

Value	Summary
URI	The uri reference for the secret or container.

Table 3.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--user [USERS], -u [USERS]	Keystone userid(s) for acl.
--project-access	Flag to enable project access behavior.
--no-project-access	Flag to disable project access behavior.
--operation-type {read}, -o {read}	Type of barbican operation acl is set for

Table 3.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 3.12. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 3.13. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 3.14. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

3.4. ACL USER ADD

Add ACL users to a secret or container as identified by its href.

Usage:

```
openstack acl user add [-h] [-f {csv,json,table,value,yaml}]
                    [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN] [--user [USERS]]
                    [--project-access | --no-project-access]
                    [--operation-type {read}]
                    URI
```

Table 3.15. Positional Arguments

Value	Summary
URI	The uri reference for the secret or container.

Table 3.16. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--user [USERS], -u [USERS]</code>	Keystone userid(s) for acl.

Value	Summary
<code>--project-access</code>	Flag to enable project access behavior.
<code>--no-project-access</code>	Flag to disable project access behavior.
<code>--operation-type {read}, -o {read}</code>	Type of barbican operation acl is set for

Table 3.17. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 3.18. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 3.19. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 3.20. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

3.5. ACL USER REMOVE

Remove ACL users from a secret or container as identified by its href.

Usage:

```
openstack acl user remove [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN] [--user [USERS]]
                          [--project-access | --no-project-access]
                          [--operation-type {read}]
                          URI
```

Table 3.21. Positional Arguments

Value	Summary
URI	The uri reference for the secret or container.

Table 3.22. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--user [USERS], -u [USERS]</code>	Keystone userid(s) for acl.
<code>--project-access</code>	Flag to enable project access behavior.
<code>--no-project-access</code>	Flag to disable project access behavior.
<code>--operation-type {read}, -o {read}</code>	Type of barbican operation acl is set for

Table 3.23. Output Formatters

Value	Summary
output formatter options- <code>{csv,json,table,value,yaml}, --format</code> <code>{csv,json,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 3.24. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 3.25. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 3.26. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 4. ACTION

This chapter describes the commands under the **action** command.

4.1. ACTION DEFINITION CREATE

Create new action.

Usage:

```
openstack action definition create [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--marker [MARKER]]
                                [--limit [LIMIT]]
                                [--sort_keys [SORT_KEYS]]
                                [--sort_dirs [SORT_DIRS]]
                                [--filter FILTERS] [--public]
                                definition
```

Table 4.1. Positional Arguments

Value	Summary
definition	Action definition file

Table 4.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc

Value	Summary
<code>--filter FILTERS</code>	Filters. can be repeated.
<code>--public</code>	With this flag action will be marked as "public".

Table 4.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 4.4. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 4.5. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 4.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

4.2. ACTION DEFINITION DEFINITION SHOW

Show action definition.

Usage:

```
openstack action definition definition show [-h] name
```

Table 4.7. Positional Arguments

Value	Summary
name	Action name

Table 4.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

4.3. ACTION DEFINITION DELETE

Delete action.

Usage:

```
openstack action definition delete [-h] action [action ...]
```

Table 4.9. Positional Arguments

Value	Summary
action	Name or id of action(s).

Table 4.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

4.4. ACTION DEFINITION LIST

List all actions.

Usage:

```
openstack action definition list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--marker [MARKER]] [--limit [LIMIT]]
[--sort_keys [SORT_KEYS]]
[--sort_dirs [SORT_DIRS]]
[--filter FILTERS]

```

Table 4.11. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Table 4.12. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 4.13. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 4.14. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 4.15. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

4.5. ACTION DEFINITION SHOW

Show specific action.

Usage:

```

openstack action definition show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                action

```

Table 4.16. Positional Arguments

Value	Summary
action	Action (name or id)

Table 4.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 4.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 4.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 4.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

4.6. ACTION DEFINITION UPDATE

Update action.

Usage:

-


```

openstack action definition update [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--marker [MARKER]]
                                [--limit [LIMIT]]
                                [--sort_keys [SORT_KEYS]]
                                [--sort_dirs [SORT_DIRS]]
                                [--filter FILTERS] [--id ID]
                                [--public]
                                definition

```

Table 4.22. Positional Arguments

Value	Summary
definition	Action definition file

Table 4.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.
--id ID	Action id.
--public	With this flag action will be marked as "public".

Table 4.24. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 4.25. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 4.26. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.27. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

4.7. ACTION EXECUTION DELETE

Delete action execution.

Usage:

```
openstack action execution delete [-h]
                                action_execution
                                [action_execution ...]
```

Table 4.28. Positional Arguments

Value	Summary
action_execution	Id of action execution identifier(s).

Table 4.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

4.8. ACTION EXECUTION INPUT SHOW

Show Action execution input data.

Usage:

```
openstack action execution input show [-h] id
```

Table 4.30. Positional Arguments

Value	Summary
id	Action execution id.

Table 4.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

4.9. ACTION EXECUTION LIST

List all Action executions.

Usage:

```
openstack action execution list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--marker [MARKER]] [--limit [LIMIT]]
                               [--sort_keys [SORT_KEYS]]
                               [--sort_dirs [SORT_DIRS]]
                               [--filter FILTERS] [--oldest]
                               [task_execution_id]
```

Table 4.32. Positional Arguments

Value	Summary
task_execution_id	Task execution id.

Table 4.33. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.
--oldest	Display the executions starting from the oldest entries instead of the newest

Table 4.34. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 4.35. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 4.36. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 4.37. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

4.10. ACTION EXECUTION OUTPUT SHOW

Show Action execution output data.

Usage:

```
openstack action execution output show [-h] id
```

Table 4.38. Positional Arguments

Value	Summary
<code>id</code>	Action execution id.

Table 4.39. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

4.11. ACTION EXECUTION RUN

Create new Action execution or just run specific action.

Usage:

```
openstack action execution run [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [-s] [--run-sync]
                             [-t TARGET]
                             name [input]
```

Table 4.40. Positional Arguments

Value	Summary
name	Action name to execute.
input	Action input.

Table 4.41. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-s, --save-result	Save the result into db.
--run-sync	Run the action synchronously.
-t TARGET, --target TARGET	Action will be executed on <target> executor.

Table 4.42. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 4.43. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.44. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 4.45. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

4.12. ACTION EXECUTION SHOW

Show specific Action execution.

Usage:

```
openstack action execution show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               action_execution
```

Table 4.46. Positional Arguments

Value	Summary
action_execution	Action execution id.

Table 4.47. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 4.48. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 4.49. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.50. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 4.51. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

4.13. ACTION EXECUTION UPDATE

Update specific Action execution.

Usage:

```
openstack action execution update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
```



```

[--state {PAUSED,RUNNING,SUCCESS,ERROR,CANCELLED}]
[--output OUTPUT]
id

```

Table 4.52. Positional Arguments

Value	Summary
id	Action execution id.

Table 4.53. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--state {PAUSED,RUNNING,SUCCESS,ERROR,CANCELLED}	Action execution state
--output OUTPUT	Action execution output

Table 4.54. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 4.55. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 4.56. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 4.57. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 5. ADDRESS

This chapter describes the commands under the **address** command.

5.1. ADDRESS SCOPE CREATE

Create a new Address Scope

Usage:

```
openstack address scope create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--ip-version {4,6}]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               [--share | --no-share]
                               <name>
```

Table 5.1. Positional Arguments

Value	Summary
<name>	New address scope name

Table 5.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--ip-version {4,6}	Ip version (default is 4)
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--share	Share the address scope between projects
--no-share	Do not share the address scope between projects (default)

Table 5.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 5.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 5.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 5.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

5.2. ADDRESS SCOPE DELETE

Delete address scope(s)

Usage:

```
openstack address scope delete [-h]
                               <address-scope> [<address-scope> ...]
```

Table 5.7. Positional Arguments

Value	Summary
<address-scope>	Address scope(s) to delete (name or id)

Table 5.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

5.3. ADDRESS SCOPE LIST

List address scopes

Usage:

```

openstack address scope list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--name <name>]
                             [--ip-version <ip-version>]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             [--share | --no-share]

```

Table 5.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List only address scopes of given name in output
--ip-version <ip-version>	List address scopes of given ip version networks (4 or 6)
--project <project>	List address scopes according to their project (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--share	List address scopes shared between projects

Value	Summary
<code>--no-share</code>	List address scopes not shared between projects

Table 5.10. Output Formatters

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to <code>table</code>
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 5.11. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to <code>nonnumeric</code>

Table 5.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 5.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <code><1</code> to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

5.4. ADDRESS SCOPE SET

Set address scope properties

Usage:

```
openstack address scope set [-h] [--name <name>] [--share | --no-share]
                             <address-scope>
```

Table 5.14. Positional Arguments

Value	Summary
<address-scope>	Address scope to modify (name or id)

Table 5.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set address scope name
--share	Share the address scope between projects
--no-share	Do not share the address scope between projects

5.5. ADDRESS SCOPE SHOW

Display address scope details

Usage:

```
openstack address scope show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <address-scope>
```

Table 5.16. Positional Arguments

Value	Summary
<address-scope>	Address scope to display (name or id)

Table 5.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 5.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 5.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 5.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 5.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 6. AGGREGATE

This chapter describes the commands under the **aggregate** command.

6.1. AGGREGATE ADD HOST

Add host to aggregate

Usage:

```
openstack aggregate add host [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <aggregate> <host>
```

Table 6.1. Positional Arguments

Value	Summary
<aggregate>	Aggregate (name or id)
<host>	Host to add to <aggregate>

Table 6.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 6.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 6.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 6.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

6.2. AGGREGATE CREATE

Create a new aggregate

Usage:

```
openstack aggregate create [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent] [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty] [--zone <availability-zone>]
    [--property <key=value>]
    <name>
```

Table 6.7. Positional Arguments

Value	Summary
<name>	New aggregate name

Table 6.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--zone <availability-zone>	Availability zone name
--property <key=value>	Property to add to this aggregate (repeat option to set multiple properties)

Table 6.9. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 6.10. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 6.12. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

6.3. AGGREGATE DELETE

Delete existing aggregate(s)

Usage:

```
openstack aggregate delete [-h] <aggregate> [<aggregate> ...]
```

Table 6.13. Positional Arguments

Value	Summary
<aggregate>	Aggregate(s) to delete (name or id)

Table 6.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

6.4. AGGREGATE LIST

List all aggregates

Usage:

```
openstack aggregate list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--long]
```

Table 6.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 6.16. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 6.17. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 6.18. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 6.19. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

6.5. AGGREGATE REMOVE HOST

Remove host from aggregate

Usage:

```
openstack aggregate remove host [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <aggregate> <host>
```

Table 6.20. Positional Arguments

Value	Summary
<code><aggregate></code>	Aggregate (name or id)
<code><host></code>	Host to remove from <aggregate>

Table 6.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 6.22. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 6.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 6.25. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

6.6. AGGREGATE SET

Set aggregate properties

Usage:

-

```

openstack aggregate set [-h] [--name <name>]
                        [--zone <availability-zone>]
                        [--property <key=value>] [--no-property]
                        <aggregate>

```

Table 6.26. Positional Arguments

Value	Summary
<aggregate>	Aggregate to modify (name or id)

Table 6.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set aggregate name
--zone <availability-zone>	Set availability zone name
--property <key=value>	Property to set on <aggregate> (repeat option to set multiple properties)
--no-property	Remove all properties from <aggregate> (specify both --property and --no-property to overwrite the current properties)

6.7. AGGREGATE SHOW

Display aggregate details

Usage:

```

openstack aggregate show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <aggregate>

```

Table 6.28. Positional Arguments

Value	Summary
<aggregate>	Aggregate to display (name or id)

Table 6.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 6.30. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 6.31. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 6.32. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 6.33. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

6.8. AGGREGATE UNSET

Unset aggregate properties

Usage:

■


```
openstack aggregate unset [-h] [--property <key>] <aggregate>
```

Table 6.34. Positional Arguments

Value	Summary
<aggregate>	Aggregate to modify (name or id)

Table 6.35. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from aggregate (repeat option to remove multiple properties)

CHAPTER 7. ALARM

This chapter describes the commands under the **alarm** command.

7.1. ALARM CREATE

Create an alarm

Usage:

```
openstack alarm create [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] --name <NAME> -t <TYPE>
                       [--project-id <PROJECT_ID>]
                       [--user-id <USER_ID>]
                       [--description <DESCRIPTION>] [--state <STATE>]
                       [--severity <SEVERITY>] [--enabled {True|False}]
                       [--alarm-action <Webhook URL>]
                       [--ok-action <Webhook URL>]
                       [--insufficient-data-action <Webhook URL>]
                       [--time-constraint <Time Constraint>]
                       [--repeat-actions {True|False}]
                       [--query <QUERY>]
                       [--comparison-operator <OPERATOR>]
                       [--evaluation-periods <EVAL_PERIODS>]
                       [--threshold <THRESHOLD>]
                       [--event-type <EVENT_TYPE>]
                       [--granularity <GRANULARITY>]
                       [--aggregation-method <AGGR_METHOD>]
                       [--metric <METRIC>]
                       [--resource-type <RESOURCE_TYPE>]
                       [--resource-id <RESOURCE_ID>]
                       [--composite-rule <COMPOSITE_RULE>]
```

Table 7.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <NAME>	Name of the alarm
-t <TYPE>, --type <TYPE>	Type of alarm, should be one of: event, composite, gnocchi_resources_threshold, gnocchi_aggregation_by_metrics_threshold, gnocchi_aggregation_by_resources_threshold.
--project-id <PROJECT_ID>	Project to associate with alarm (configurable by admin users only)

Value	Summary
<code>--user-id <USER_ID></code>	User to associate with alarm (configurable by admin users only)
<code>--description <DESCRIPTION></code>	Free text description of the alarm
<code>--state <STATE></code>	State of the alarm, one of: [<i>ok, alarm, insufficient data</i>]
<code>--severity <SEVERITY></code>	Severity of the alarm, one of: [<i>low, moderate, critical</i>]
<code>--enabled {True</code>	<code>False}</code>
True if alarm evaluation is enabled	<code>--alarm-action <Webhook URL></code>
Url to invoke when state transitions to alarm. may be used multiple times	<code>--ok-action <Webhook URL></code>
Url to invoke when state transitions to ok. may be used multiple times	<code>--insufficient-data-action <Webhook URL></code>
Url to invoke when state transitions to insufficient data. May be used multiple times	<code>--time-constraint <Time Constraint></code>
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: <code>name=<CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;[description=<DESCRIPTION>;[timezone=<IANA Timezone>]]</code>	<code>--repeat-actions {True</code>
<code>False}</code>	True if actions should be repeatedly notified while alarm remains in target state

Table 7.2. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 7.3. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 7.4. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

Table 7.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

Table 7.6. common alarm rules

Value	Summary
<code>--query <QUERY></code>	For alarms of type event: <code>key[op]data_type::value;</code> list. <code>data_type</code> is optional, but if supplied must be string, integer, float, or boolean. For alarms of type <code>gnocchi_aggregation_by_resources_threshold</code> : need to specify a complex query json string, like: <code>{"and": [{"=": {"ended_at": null}}, ...]}</code> .
<code>--comparison-operator <OPERATOR></code>	Operator to compare with, one of: <code>[lt, le, eq, ne, ge, gt]</code>
<code>--evaluation-periods <EVAL_PERIODS></code>	Number of periods to evaluate over
<code>--threshold <THRESHOLD></code>	Threshold to evaluate against.

Table 7.7. event alarm

Value	Summary
<code>--event-type <EVENT_TYPE></code>	Event type to evaluate against

Table 7.8. common gnocchi alarm rules

Value	Summary
<code>--granularity <GRANULARITY></code>	The time range in seconds over which to query.
<code>--aggregation-method <AGGR_METHOD></code>	The aggregation_method to compare to the threshold.
<code>--metric <METRIC>, --metrics <METRIC></code>	The metric id or name depending of the alarm type

Table 7.9. gnocchi resource threshold alarm

Value	Summary
<code>--resource-type <RESOURCE_TYPE></code>	The type of resource.
<code>--resource-id <RESOURCE_ID></code>	The id of a resource.

Table 7.10. composite alarm

Value	Summary
<code>--composite-rule <COMPOSITE_RULE></code>	Composite threshold rule with json format, the form can be a nested dict which combine gnocchi rules by "and", "or". For example, the form is like: {"or": [RULE1, RULE2, {"and": [RULE3, RULE4]}]}.

7.2. ALARM DELETE

Delete an alarm

Usage:

```
openstack alarm delete [-h] [--name <NAME>] [<ALARM ID or NAME>]
```

Table 7.11. Positional Arguments

Value	Summary
<code><ALARM ID or NAME></code>	Id or name of an alarm.

Table 7.12. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--name <NAME></code>	Name of the alarm

7.3. ALARM-HISTORY SEARCH

Show history for all alarms based on query

Usage:

```
openstack alarm-history search [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--query QUERY]
```

Table 7.13. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--query QUERY</code>	Rich query supported by aodh, e.g. <code>project_id!=my-id user_id=foo</code> or <code>user_id=bar</code>

Table 7.14. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 7.15. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 7.16. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 7.17. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

7.4. ALARM-HISTORY SHOW

Show history for an alarm

Usage:

```

openstack alarm-history show [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--limit <LIMIT>] [--marker <MARKER>]
                             [--sort <SORT_KEY:SORT_DIR>]
                             <alarm-id>

```

Table 7.18. Positional Arguments

Value	Summary
<code><alarm-id></code>	Id of an alarm

Table 7.19. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--limit <LIMIT></code>	Number of resources to return (default is server default)

Value	Summary
<code>--marker <MARKER></code>	Last item of the previous listing. return the next results after this value, the supported marker is <code>event_id</code> .
<code>--sort <SORT_KEY:SORT_DIR></code>	Sort of resource attribute. e.g. <code>timestamp:desc</code>

Table 7.20. Output Formatters

Value	Summary
output formatter options- <code>-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to <code>table</code>
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 7.21. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to <code>nonnumeric</code>

Table 7.22. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 7.23. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <code><1</code> to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

7.5. ALARM LIST

List alarms

Usage:

```
openstack alarm list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--query QUERY | --filter <KEY1=VALUE1;KEY2=VALUE2...>]
                    [--limit <LIMIT>] [--marker <MARKER>]
                    [--sort <SORT_KEY:SORT_DIR>]
```

Table 7.24. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--query QUERY	Rich query supported by aodh, e.g. project_id!=my-id user_id=foo or user_id=bar
--filter <KEY1=VALUE1;KEY2=VALUE2...>	Filter parameters to apply on returned alarms.
--limit <LIMIT>	Number of resources to return (default is server default)
--marker <MARKER>	Last item of the previous listing. return the next results after this value, the supported marker is alarm_id.
--sort <SORT_KEY:SORT_DIR>	Sort of resource attribute, e.g. name:asc

Table 7.25. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 7.26. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 7.27. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 7.28. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

7.6. ALARM SHOW

Show an alarm

Usage:

```
openstack alarm show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--name <NAME>]
                    [<ALARM ID or NAME>]
```

Table 7.29. Positional Arguments

Value	Summary
<code><ALARM ID or NAME></code>	Id or name of an alarm.

Table 7.30. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--name <NAME></code>	Name of the alarm

Table 7.31. Output Formatters

Value	Summary
output formatter options- <code>f</code> {json,shell,table,value,yaml}, <code>--format</code> {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 7.32. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 7.33. Shell Formatter

Value	Summary
a format a UNIX shell can parse (<code>variable="value"</code>)-- prefix PREFIX	Add a prefix to all variable names

Table 7.34. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

7.7. ALARM STATE GET

Get state of an alarm

Usage:

■

```

openstack alarm state get [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--name <NAME>]
                          [<ALARM ID or NAME>]

```

Table 7.35. Positional Arguments

Value	Summary
<ALARM ID or NAME>	Id or name of an alarm.

Table 7.36. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <NAME>	Name of the alarm

Table 7.37. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 7.38. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 7.39. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 7.40. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

7.8. ALARM STATE SET

Set state of an alarm

Usage:

```
openstack alarm state set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--name <NAME>] --state
                        <STATE>
                        [<ALARM ID or NAME>]
```

Table 7.41. Positional Arguments

Value	Summary
<code><ALARM ID or NAME></code>	Id or name of an alarm.

Table 7.42. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <NAME></code>	Name of the alarm
<code>--state <STATE></code>	State of the alarm, one of: [<i>ok, alarm, insufficient data</i>]

Table 7.43. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 7.44. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 7.45. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 7.46. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

7.9. ALARM UPDATE

Update an alarm

Usage:

```
openstack alarm update [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--name <NAME>] [-t <TYPE>]
```

```

[--project-id <PROJECT_ID>]
[--user-id <USER_ID>]
[--description <DESCRIPTION>] [--state <STATE>]
[--severity <SEVERITY>] [--enabled {True|False}]
[--alarm-action <Webhook URL>]
[--ok-action <Webhook URL>]
[--insufficient-data-action <Webhook URL>]
[--time-constraint <Time Constraint>]
[--repeat-actions {True|False}]
[--query <QUERY>]
[--comparison-operator <OPERATOR>]
[--evaluation-periods <EVAL_PERIODS>]
[--threshold <THRESHOLD>]
[--event-type <EVENT_TYPE>]
[--granularity <GRANULARITY>]
[--aggregation-method <AGGR_METHOD>]
[--metric <METRIC>]
[--resource-type <RESOURCE_TYPE>]
[--resource-id <RESOURCE_ID>]
[--composite-rule <COMPOSITE_RULE>]
[<ALARM ID or NAME>]

```

Table 7.47. Positional Arguments

Value	Summary
<ALARM ID or NAME>	Id or name of an alarm.

Table 7.48. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <NAME>	Name of the alarm
-t <TYPE>, --type <TYPE>	Type of alarm, should be one of: event, composite, gnocchi_resources_threshold, gnocchi_aggregation_by_metrics_threshold, gnocchi_aggregation_by_resources_threshold.
--project-id <PROJECT_ID>	Project to associate with alarm (configurable by admin users only)
--user-id <USER_ID>	User to associate with alarm (configurable by admin users only)
--description <DESCRIPTION>	Free text description of the alarm
--state <STATE>	State of the alarm, one of: [<i>ok, alarm, insufficient data</i>]

Value	Summary
--severity <SEVERITY>	Severity of the alarm, one of: [<i>low, moderate, critical</i>]
--enabled {True	False}
True if alarm evaluation is enabled	--alarm-action <Webhook URL>
Url to invoke when state transitions to alarm. may be used multiple times	--ok-action <Webhook URL>
Url to invoke when state transitions to ok. may be used multiple times	--insufficient-data-action <Webhook URL>
Url to invoke when state transitions to insufficient data. May be used multiple times	--time-constraint <Time Constraint>
Only evaluate the alarm if the time at evaluation is within this time constraint. Start point(s) of the constraint are specified with a cron expression, whereas its duration is given in seconds. Can be specified multiple times for multiple time constraints, format is: name=<CONSTRAINT_NAME>;start=<CRON>;duration=<SECONDS>;[description=<DESCRIPTION>;[timezone=<IANA Timezone>]]	--repeat-actions {True
False}	True if actions should be repeatedly notified while alarm remains in target state

Table 7.49. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 7.50. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 7.51. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 7.52. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

Table 7.53. common alarm rules

Value	Summary
--query <QUERY>	For alarms of type event: key[op]data_type::value; list. data_type is optional, but if supplied must be string, integer, float, or boolean. For alarms of type gnocchi_aggregation_by_resources_threshold: need to specify a complex query json string, like: {"and": [{"="": {"ended_at": null}}, ...]}.
--comparison-operator <OPERATOR>	Operator to compare with, one of: [<i>lt, le, eq, ne, ge, gt</i>]
--evaluation-periods <EVAL_PERIODS>	Number of periods to evaluate over
--threshold <THRESHOLD>	Threshold to evaluate against.

Table 7.54. event alarm

Value	Summary
--event-type <EVENT_TYPE>	Event type to evaluate against

Table 7.55. common gnocchi alarm rules

Value	Summary
--granularity <GRANULARITY>	The time range in seconds over which to query.

Value	Summary
<code>--aggregation-method <AGGR_METHOD></code>	The aggregation_method to compare to the threshold.
<code>--metric <METRIC>, --metrics <METRIC></code>	The metric id or name depending of the alarm type

Table 7.56. gnocchi resource threshold alarm

Value	Summary
<code>--resource-type <RESOURCE_TYPE></code>	The type of resource.
<code>--resource-id <RESOURCE_ID></code>	The id of a resource.

Table 7.57. composite alarm

Value	Summary
<code>--composite-rule <COMPOSITE_RULE></code>	Composite threshold rule with json format, the form can be a nested dict which combine gnocchi rules by "and", "or". For example, the form is like: <code>{"or": [RULE1, RULE2, {"and": [RULE3, RULE4]}]}</code> .

CHAPTER 8. ALARMING

This chapter describes the commands under the **alarming** command.

8.1. ALARMING CAPABILITIES LIST

List capabilities of alarming service

Usage:

```
openstack alarming capabilities list [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
```

Table 8.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 8.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 8.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 8.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 8.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 9. APPLICATION

This chapter describes the commands under the **application** command.

9.1. APPLICATION CREDENTIAL CREATE

Create new application credential

Usage:

```
openstack application credential create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--secret <secret>]
                                     [--role <role>]
                                     [--expiration <expiration>]
                                     [--description <description>]
                                     [--unrestricted] [--restricted]
                                     <name>
```

Table 9.1. Positional Arguments

Value	Summary
<name>	Name of the application credential

Table 9.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--secret <secret>	Secret to use for authentication (if not provided, one will be generated)
--role <role>	Roles to authorize (name or id) (repeat option to set multiple values)
--expiration <expiration>	Sets an expiration date for the application credential, format of YYYY-mm-ddTHH:MM:SS (if not provided, the application credential will not expire)
--description <description>	Application credential description

Value	Summary
<code>--unrestricted</code>	Enable application credential to create and delete other application credentials and trusts (this is potentially dangerous behavior and is disabled by default)
<code>--restricted</code>	Prohibit application credential from creating and deleting other application credentials and trusts (this is the default behavior)

Table 9.3. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 9.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 9.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (<code>variable="value"</code>)-- prefix PREFIX	Add a prefix to all variable names

Table 9.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

9.2. APPLICATION CREDENTIAL DELETE

Delete application credentials(s)

Usage:

```
openstack application credential delete [-h]
                                     <application-credential>
                                     [<application-credential> ...]
```

Table 9.7. Positional Arguments

Value	Summary
<application-credential>	Application credentials(s) to delete (name or id)

Table 9.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

9.3. APPLICATION CREDENTIAL LIST

List application credentials

Usage:

```
openstack application credential list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--user <user>]
                                     [--user-domain <user-domain>]
```

Table 9.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	User whose application credentials to list (name or ID)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Table 9.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 9.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 9.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

9.4. APPLICATION CREDENTIAL SHOW

Display application credential details

Usage:

```
openstack application credential show [-h]
                                     [-f {json,shell,table,value,yaml}]
```



```

[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
<application-credential>

```

Table 9.14. Positional Arguments

Value	Summary
<application-credential>	Application credential to display (name or id)

Table 9.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 9.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 9.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 9.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 9.19. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 10. AVAILABILITY

This chapter describes the commands under the **availability** command.

10.1. AVAILABILITY ZONE LIST

List availability zones and their status

Usage:

```
openstack availability zone list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--compute] [--network] [--volume]
                                [--long]
```

Table 10.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--compute	List compute availability zones
--network	List network availability zones
--volume	List volume availability zones
--long	List additional fields in output

Table 10.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 10.3. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 10.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 10.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 11. BAREMETAL

This chapter describes the commands under the **baremetal** command.

11.1. BAREMETAL ALLOCATION CREATE

Create a new baremetal allocation.

Usage:

```
openstack baremetal allocation create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     --resource-class RESOURCE_CLASS
                                     [--trait TRAITS]
                                     [--candidate-node CANDIDATE_NODES]
                                     [--name NAME] [--uuid UUID]
                                     [--extra <key=value>]
                                     [--wait [<time-out>]]
```

Table 11.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-class RESOURCE_CLASS	Resource class to request.
--trait TRAITS	A trait to request. can be specified multiple times.
--candidate-node CANDIDATE_NODES	A candidate node for this allocation. can be specified multiple times. If at least one is specified, only the provided candidate nodes are considered for the allocation.
--name NAME	Unique name of the allocation.
--uuid UUID	Uuid of the allocation.
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.
--wait [<time-out>]	Wait for the new allocation to become active. an error is returned if allocation fails and --wait is used. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

Table 11.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.2. BAREMETAL ALLOCATION DELETE

Unregister baremetal allocation(s).

Usage:

```
openstack baremetal allocation delete [-h]
                                     <allocation> [<allocation> ...]
```

Table 11.6. Positional Arguments

Value	Summary
<allocation>	Allocations(s) to delete (name or uuid).

Table 11.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.3. BAREMETAL ALLOCATION LIST

List baremetal allocations.

Usage:

```

openstack baremetal allocation list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--noindent]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--sort-column SORT_COLUMN]
                                   [--limit <limit>]
                                   [--marker <allocation>]
                                   [--sort <key>[:<direction>]]
                                   [--node <node>]
                                   [--resource-class <resource_class>]
                                   [--state <state>]
                                   [--long | --fields <field> [<field> ...]]

```

Table 11.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of allocations to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <allocation>	Allocation uuid (for example, of the last allocation in the list from a previous request). Returns the list of allocations after this UUID.
--sort <key>[:<direction>]	Sort output by specified allocation fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.

Value	Summary
<code>--node <node></code>	Only list allocations of this node (name or uuid).
<code>--resource-class <resource_class></code>	Only list allocations with this resource class.
<code>--state <state></code>	Only list allocations in this state.
<code>--long</code>	Show detailed information about the allocations.
<code>--fields <field> [<field> ...]</code>	One or more allocation fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.

Table 11.9. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.10. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.11. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.12. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.4. BAREMETAL ALLOCATION SHOW

Show baremetal allocation details.

Usage:

```
openstack baremetal allocation show [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--fields <field> [<field> ...]]
                                   <id>
```

Table 11.13. Positional Arguments

Value	Summary
<code><id></code>	Uuid or name of the allocation

Table 11.14. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--fields <field> [<field> ...]</code>	One or more allocation fields. only these fields will be fetched from the server.

Table 11.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.17. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.18. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.5. BAREMETAL CHASSIS CREATE

Create a new chassis.

Usage:

```
openstack baremetal chassis create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>]
                                [--fit-width] [--print-empty]
```

```

[--description <description>]
[--extra <key=value>]
[--uuid <uuid>]

```

Table 11.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description for the chassis
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.
--uuid <uuid>	Unique uuid of the chassis

Table 11.20. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.21. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.22. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.23. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.6. BAREMETAL CHASSIS DELETE

Delete a chassis.

Usage:

```
openstack baremetal chassis delete [-h] <chassis> [<chassis> ...]
```

Table 11.24. Positional Arguments

Value	Summary
<chassis>	Uuids of chassis to delete

Table 11.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.7. BAREMETAL CHASSIS LIST

List the chassis.

Usage:

```
openstack baremetal chassis list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--fields <field> [<field> ...]]
                                [--limit <limit>] [--long]
                                [--marker <chassis>]
                                [--sort <key>[:<direction>]]
```

Table 11.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	One or more chassis fields. only these fields will be fetched from the server. Cannot be used when <i>--long</i> is specified.
--limit <limit>	Maximum number of chassis to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--long	Show detailed information about the chassis
--marker <chassis>	Chassis uuid (for example, of the last chassis in the list from a previous request). Returns the list of chassis after this UUID.
--sort <key>[:<direction>]	Sort output by specified chassis fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.

Table 11.27. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.28. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.29. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.30. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.8. BAREMETAL CHASSIS SET

Set chassis properties.

Usage:

```
openstack baremetal chassis set [-h] [--description <description>]
                               [--extra <key=value>]
                               <chassis>
```

Table 11.31. Positional Arguments

Value	Summary
<code><chassis></code>	Uuid of the chassis

Table 11.32. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description <description></code>	Set the description of the chassis
<code>--extra <key=value></code>	Extra to set on this chassis (repeat option to set multiple extras)

11.9. BAREMETAL CHASSIS SHOW

Show chassis details.

Usage:

```
openstack baremetal chassis show [-h]
                                  [-f {json,shell,table,value,yaml}]
```

```

[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>] [--fit-width]
[--print-empty]
[--fields <field> [<field> ...]]
<chassis>

```

Table 11.33. Positional Arguments

Value	Summary
<chassis>	Uuid of the chassis

Table 11.34. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	One or more chassis fields. only these fields will be fetched from the server.

Table 11.35. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.36. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.37. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.38. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.10. BAREMETAL CHASSIS UNSET

Unset chassis properties.

Usage:

```
openstack baremetal chassis unset [-h] [--description] [--extra <key>]
                                <chassis>
```

Table 11.39. Positional Arguments

Value	Summary
<code><chassis></code>	Uuid of the chassis

Table 11.40. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description</code>	Clear the chassis description
<code>--extra <key></code>	Extra to unset on this chassis (repeat option to unset multiple extras)

11.11. BAREMETAL CONDUCTOR LIST

List baremetal conductors

Usage:

```
openstack baremetal conductor list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
```



```

[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--limit <limit>]
[--marker <conductor>]
[--sort <key>[:<direction>]]
[--long | --fields <field> [<field> ...]]

```

Table 11.41. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of conductors to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <conductor>	Hostname of the conductor (for example, of the last conductor in the list from a previous request). Returns the list of conductors after this conductor.
--sort <key>[:<direction>]	Sort output by specified conductor fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
--long	Show detailed information about the conductors.
--fields <field> [<field> ...]	One or more conductor fields. only these fields will be fetched from the server. Can not be used when <i>--long</i> is specified.

Table 11.42. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.43. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.44. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.45. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.12. BAREMETAL CONDUCTOR SHOW

Show baremetal conductor details

Usage:

```
openstack baremetal conductor show [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--fields <field> [<field> ...]]
                                   <conductor>
```

Table 11.46. Positional Arguments

Value	Summary
<code><conductor></code>	Hostname of the conductor

Table 11.47. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	One or more conductor fields. only these fields will be fetched from the server.

Table 11.48. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.49. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.50. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.51. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.13. BAREMETAL CREATE

Create resources from files

Usage:

```
openstack baremetal create [-h] <file> [<file> ...]
```

Table 11.52. Positional Arguments

Value	Summary
<file>	File (.yaml or .json) containing descriptions of the resources to create. Can be specified multiple times.

Table 11.53. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.14. BAREMETAL DEPLOY TEMPLATE CREATE

Create a new deploy template

Usage:

```
openstack baremetal deploy template create [-h]
      [-f {json,shell,table,value,yaml}]
      [-c COLUMN] [--noindent]
      [--prefix PREFIX]
      [--max-width <integer>]
      [--fit-width]
      [--print-empty]
      [--uuid <uuid>]
      [--extra <key=value>]
      --steps <steps>
      <name>
```

Table 11.54. Positional Arguments

Value	Summary
<name>	Unique name for this deploy template. must be a valid trait name

Table 11.55. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--uuid <uuid></code>	Uuid of the deploy template.
<code>--extra <key=value></code>	Record arbitrary key/value metadata. can be specified multiple times.
<code>--steps <steps></code>	The deploy steps in json format. may be the path to a file containing the deploy steps; OR -, with the deploy steps being read from standard input; OR a string. The value should be a list of deploy-step dictionaries; each dictionary should have keys <i>interface</i> , <i>step</i> , <i>args</i> and <i>priority</i> .

Table 11.56. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 11.57. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.58. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.59. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.15. BAREMETAL DEPLOY TEMPLATE DELETE

Delete deploy template(s).

Usage:

```
openstack baremetal deploy template delete [-h]
      <template> [<template> ...]
```

Table 11.60. Positional Arguments

Value	Summary
<template>	Name(s) or uuid(s) of the deploy template(s) to delete.

Table 11.61. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.16. BAREMETAL DEPLOY TEMPLATE LIST

List baremetal deploy templates.

Usage:

```
openstack baremetal deploy template list [-h]
      [-f {csv,json,table,value,yaml}]
      [-c COLUMN]
      [--quote {all,minimal,none,nonnumeric}]
      [--noindent]
      [--max-width <integer>]
      [--fit-width] [--print-empty]
      [--sort-column SORT_COLUMN]
      [--limit <limit>]
      [--marker <template>]
      [--sort <key>[:<direction>]]
      [--long | --fields <field> [<field> ...]]
```

Table 11.62. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of deploy templates to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <template>	Deploytemplate uuid (for example, of the last deploy template in the list from a previous request). Returns the list of deploy templates after this UUID.
--sort <key>[:<direction>]	Sort output by specified deploy template fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
--long	Show detailed information about deploy templates.
--fields <field> [<field> ...]	One or more deploy template fields. only these fields will be fetched from the server. Can not be used when <i>--long</i> is specified.

Table 11.63. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.64. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.65. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.66. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.17. BAREMETAL DEPLOY TEMPLATE SET

Set baremetal deploy template properties.

Usage:

```
openstack baremetal deploy template set [-h] [--name <name>]
                                     [--steps <steps>]
                                     [--extra <key=value>]
                                     <template>
```

Table 11.67. Positional Arguments

Value	Summary
<code><template></code>	Name or uuid of the deploy template

Table 11.68. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Set unique name of the deploy template. must be a valid trait name.

Value	Summary
<code>--steps <steps></code>	The deploy steps in json format. may be the path to a file containing the deploy steps; OR -, with the deploy steps being read from standard input; OR a string. The value should be a list of deploy-step dictionaries; each dictionary should have keys <i>interface</i> , <i>step</i> , <i>args</i> and <i>priority</i> .
<code>--extra <key=value></code>	Extra to set on this baremetal deploy template (repeat option to set multiple extras).

11.18. BAREMETAL DEPLOY TEMPLATE SHOW

Show baremetal deploy template details.

Usage:

```
openstack baremetal deploy template show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--fields <field> [<field> ...]]
                                         <template>
```

Table 11.69. Positional Arguments

Value	Summary
<code><template></code>	Name or uuid of the deploy template.

Table 11.70. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--fields <field> [<field> ...]</code>	One or more deploy template fields. only these fields will be fetched from the server.

Table 11.71. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.72. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.73. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.74. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.19. BAREMETAL DEPLOY TEMPLATE UNSET

Unset baremetal deploy template properties.

Usage:

```
openstack baremetal deploy template unset [-h] [--extra <key>]
<template>
```

Table 11.75. Positional Arguments

Value	Summary
<template>	Name or uuid of the deploy template

Table 11.76. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--extra <key>	Extra to unset on this baremetal deploy template (repeat option to unset multiple extras).

11.20. BAREMETAL DRIVER LIST

List the enabled drivers.

Usage:

```
openstack baremetal driver list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--type <type>] [--long]
```

Table 11.77. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type <type>	Type of driver ("classic" or "dynamic"). the default is to list all of them.
--long	Show detailed information about the drivers.

Table 11.78. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.79. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.80. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.81. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.21. BAREMETAL DRIVER PASSTHRU CALL

Call a vendor passthru method for a driver.

Usage:

```
openstack baremetal driver passthru call [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--arg <key=value>]
    [--http-method <http-method>]
    <driver> <method>
```

Table 11.82. Positional Arguments

Value	Summary
<driver>	Name of the driver.
<method>	Vendor passthru method to be called.

Table 11.83. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--arg <key=value>	Argument to pass to the passthru method (repeat option to specify multiple arguments).
--http-method <http-method>	The http method to use in the passthru request. one of DELETE, GET, PATCH, POST, PUT. Defaults to <i>POST</i> .

Table 11.84. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.85. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.86. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.87. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.22. BAREMETAL DRIVER PASSTHRU LIST

List available vendor passthru methods for a driver.

Usage:

```

openstack baremetal driver passthru list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     <driver>

```

Table 11.88. Positional Arguments

Value	Summary
<code><driver></code>	Name of the driver.

Table 11.89. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 11.90. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.91. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.92. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.93. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.23. BAREMETAL DRIVER PROPERTY LIST

List the driver properties.

Usage:

```
openstack baremetal driver property list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
<driver>

```

Table 11.94. Positional Arguments

Value	Summary
<driver>	Name of the driver.

Table 11.95. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.96. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.97. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.98. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.99. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.24. BAREMETAL DRIVER RAID PROPERTY LIST

List a driver's RAID logical disk properties.

Usage:

```
openstack baremetal driver raid property list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         <driver>
```

Table 11.100. Positional Arguments

Value	Summary
<code><driver></code>	Name of the driver.

Table 11.101. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 11.102. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.103. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.104. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.105. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.25. BAREMETAL DRIVER SHOW

Show information about a driver.

Usage:

```
openstack baremetal driver show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty]
<driver>

```

Table 11.106. Positional Arguments

Value	Summary
<driver>	Name of the driver.

Table 11.107. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.108. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.109. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.110. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.111. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.26. BAREMETAL INTROSPECTION ABORT

Abort running introspection for node.

Usage:

```
openstack baremetal introspection abort [-h] node
```

Table 11.112. Positional Arguments

Value	Summary
node	Baremetal node uuid or name

Table 11.113. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.27. BAREMETAL INTROSPECTION DATA SAVE

Save or display raw introspection data.

Usage:

```
openstack baremetal introspection data save [-h] [--file <filename>]
node
```

Table 11.114. Positional Arguments

Value	Summary
node	Baremetal node uuid or name

Table 11.115. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--file <filename>	Downloaded introspection data filename (default: stdout)

11.28. BAREMETAL INTROSPECTION INTERFACE LIST

List interface data including attached switch port information.

Usage:

```

openstack baremetal introspection interface list [-h]
                                                [-f {csv,json,table,value,yaml}]
                                                [-c COLUMN]
                                                [--quote {all,minimal,none,nonnumeric}]
                                                [--noindent]
                                                [--max-width <integer>]
                                                [--fit-width]
                                                [--print-empty]
                                                [--sort-column SORT_COLUMN]
                                                [--vlan VLAN]
                                                [--long | --fields <field> [<field> ...]]
node_ident

```

Table 11.116. Positional Arguments

Value	Summary
node_ident	Baremetal node uuid or name

Table 11.117. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--vlan VLAN	List only interfaces configured for this vlan id, can be repeated
--long	Show detailed information about interfaces.
--fields <field> [<field> ...]	Display one or more fields. can not be used when <i>--long</i> is specified

Table 11.118. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.119. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.120. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.121. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.29. BAREMETAL INTROSPECTION INTERFACE SHOW

Show interface data including attached switch port information.

Usage:

```
openstack baremetal introspection interface show [-h]
          [-f {json,shell,table,value,yaml}]
          [-c COLUMN]
          [--noindent]
```

```

[--prefix PREFIX]
[--max-width <integer>]
[--fit-width]
[--print-empty]
[--fields <field> [<field> ...]]
node_id interface

```

Table 11.122. Positional Arguments

Value	Summary
node_id	Baremetal node uuid or name
interface	Interface name

Table 11.123. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	Display one or more fields.

Table 11.124. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.125. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.126. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.127. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.30. BAREMETAL INTROSPECTION LIST

List introspection statuses

Usage:

```
openstack baremetal introspection list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--marker MARKER]
                                     [--limit LIMIT]
```

Table 11.128. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--marker MARKER</code>	Uuid of the last item on the previous page
<code>--limit LIMIT</code>	The amount of items to return

Table 11.129. Output Formatters

Value	Summary
output formatter options- <code>f</code> <code>{csv,json,table,value,yaml}, --format</code> <code>{csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.130. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.131. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.132. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.31. BAREMETAL INTROSPECTION REPROCESS

Reprocess stored introspection data

Usage:

```
openstack baremetal introspection reprocess [-h] node
```

Table 11.133. Positional Arguments

Value	Summary
node	Baremetal node uuid or name

Table 11.134. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.32. BAREMETAL INTROSPECTION RULE DELETE

Delete an introspection rule.

Usage:

```
openstack baremetal introspection rule delete [-h] uuid
```

Table 11.135. Positional Arguments

Value	Summary
uuid	Rule uuid

Table 11.136. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.33. BAREMETAL INTROSPECTION RULE IMPORT

Import one or several introspection rules from a JSON/YAML file.

Usage:

```
openstack baremetal introspection rule import [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--sort-column SORT_COLUMN]
file
```

Table 11.137. Positional Arguments

Value	Summary
file	Json or yaml file to import, may contain one or several rules

Table 11.138. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.139. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.140. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.141. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.142. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.34. BAREMETAL INTROSPECTION RULE LIST

List all introspection rules.

Usage:

```
openstack baremetal introspection rule list [-h]
                                           [-f {csv,json,table,value,yaml}]
                                           [-c COLUMN]
                                           [--quote {all,minimal,none,nonnumeric}]
                                           [--noindent]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty]
                                           [--sort-column SORT_COLUMN]
```

Table 11.143. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.144. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.145. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.146. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.147. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.35. BAREMETAL INTROSPECTION RULE PURGE

Drop all introspection rules.

Usage:

```
openstack baremetal introspection rule purge [-h]
```

Table 11.148. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

11.36. BAREMETAL INTROSPECTION RULE SHOW

Show an introspection rule.

Usage:

```
openstack baremetal introspection rule show [-h]
      [-f {json,shell,table,value,yaml}]
      [-c COLUMN] [--noindent]
      [--prefix PREFIX]
      [--max-width <integer>]
      [--fit-width]
      [--print-empty]
      uuid
```

Table 11.149. Positional Arguments

Value	Summary
<code>uuid</code>	Rule uuid

Table 11.150. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.151. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.152. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.153. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.154. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.37. BAREMETAL INTROSPECTION START

Start the introspection.

Usage:

■

```

openstack baremetal introspection start [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--wait] [--check-errors]
node [node ...]

```

Table 11.155. Positional Arguments

Value	Summary
node	Baremetal node uuid(s) or name(s)

Table 11.156. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for introspection to finish; the result will be displayed in the end
--check-errors	Check if errors occurred during the introspection; if any error occurs only the errors are displayed; can only be used with --wait

Table 11.157. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.158. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.159. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.160. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.38. BAREMETAL INTROSPECTION STATUS

Get introspection status.

Usage:

```

openstack baremetal introspection status [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
node

```

Table 11.161. Positional Arguments

Value	Summary
node	Baremetal node uuid or name

Table 11.162. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.163. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.164. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.165. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.166. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.39. BAREMETAL NODE ABORT

Set provision state of baremetal node to *abort*

Usage:

```
openstack baremetal node abort [-h] <node>
```

Table 11.167. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.168. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.40. BAREMETAL NODE ADD TRAIT

Add traits to a node.

Usage:

```
openstack baremetal node add trait [-h] <node> <trait> [<trait> ...]
```

Table 11.169. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<trait>	Trait(s) to add

Table 11.170. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.41. BAREMETAL NODE ADOPT

Set provision state of baremetal node to *adopt*

Usage:

```
openstack baremetal node adopt [-h] [--wait [<time-out>]] <node>
```

Table 11.171. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.172. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, active. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

11.42. BAREMETAL NODE BIOS SETTING LIST

List a node's BIOS settings.

Usage:

```
openstack baremetal node bios setting list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         <node>
```

Table 11.173. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.174. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.175. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.176. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.177. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.178. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.43. BAREMETAL NODE BIOS SETTING SHOW

Show a specific BIOS setting for a node.

Usage:

```
openstack baremetal node bios setting show [-h]
      [-f {json,shell,table,value,yaml}]
      [-c COLUMN] [--noindent]
      [--prefix PREFIX]
      [--max-width <integer>]
      [--fit-width]
      [--print-empty]
      <node> <setting name>
```

Table 11.179. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<setting name>	Setting name to show

Table 11.180. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.181. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.182. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.183. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.184. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.44. BAREMETAL NODE BOOT DEVICE SET

Set the boot device for a node

Usage:

```
openstack baremetal node boot device set [-h] [--persistent]
    <node> <device>
```

Table 11.185. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<device>	One of bios, cdrom, disk, pxe, safe, wanboot

Table 11.186. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--persistent	Make changes persistent for all future boots

11.45. BAREMETAL NODE BOOT DEVICE SHOW

Show the boot device information for a node

Usage:

```
openstack baremetal node boot device show [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--supported]
<node>

```

Table 11.187. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.188. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--supported	Show the supported boot devices

Table 11.189. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.190. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.191. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.192. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.46. BAREMETAL NODE CLEAN

Set provision state of baremetal node to *clean*

Usage:

```
openstack baremetal node clean [-h] [--wait [<time-out>]] --clean-steps
    <clean-steps>
    <node>
```

Table 11.193. Positional Arguments

Value	Summary
<code><node></code>	Name or uuid of the node.

Table 11.194. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--wait [<time-out>]</code>	Wait for a node to reach the desired state, manageable. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.
<code>--clean-steps <clean-steps></code>	The clean steps in json format. may be the path to a file containing the clean steps; OR -, with the clean steps being read from standard input; OR a string. The value should be a list of clean-step dictionaries; each dictionary should have keys <i>interface</i> and <i>step</i> , and optional key <i>args</i> .

11.47. BAREMETAL NODE CONSOLE DISABLE

Disable console access for a node

Usage:

```
openstack baremetal node console disable [-h] <node>
```

Table 11.195. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.196. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.48. BAREMETAL NODE CONSOLE ENABLE

Enable console access for a node

Usage:

```
openstack baremetal node console enable [-h] <node>
```

Table 11.197. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.198. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.49. BAREMETAL NODE CONSOLE SHOW

Show console information for a node

Usage:

```
openstack baremetal node console show [-h]
[-f {json,shell,table,value,yaml}]
```

```

[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
<node>

```

Table 11.199. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.200. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.201. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.202. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.203. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.204. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.50. BAREMETAL NODE CREATE

Register a new node with the baremetal service

Usage:

```
openstack baremetal node create [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty]
    [--chassis-uuid <chassis>] --driver
    <driver> [--driver-info <key=value>]
    [--property <key=value>]
    [--extra <key=value>] [--uuid <uuid>]
    [--name <name>]
    [--bios-interface <bios_interface>]
    [--boot-interface <boot_interface>]
    [--console-interface <console_interface>]
    [--deploy-interface <deploy_interface>]
    [--inspect-interface <inspect_interface>]
    [--management-interface <management_interface>]
    [--network-interface <network_interface>]
    [--power-interface <power_interface>]
    [--raid-interface <raid_interface>]
    [--rescue-interface <rescue_interface>]
    [--storage-interface <storage_interface>]
    [--vendor-interface <vendor_interface>]
    [--resource-class <resource_class>]
    [--conductor-group <conductor_group>]
    [--automated-clean] [--owner <owner>]
    [--description <description>]
```

Table 11.205. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--chassis-uuid <chassis></code>	Uuid of the chassis that this node belongs to.
<code>--driver <driver></code>	Driver used to control the node [required].
<code>--driver-info <key=value></code>	Key/value pair used by the driver, such as out-of-band management credentials. Can be specified multiple times.
<code>--property <key=value></code>	Key/value pair describing the physical characteristics of the node. This is exported to Nova and used by the scheduler. Can be specified multiple times.
<code>--extra <key=value></code>	Record arbitrary key/value metadata. can be specified multiple times.
<code>--uuid <uuid></code>	Unique uuid for the node.
<code>--name <name></code>	Unique name for the node.
<code>--bios-interface <bios_interface></code>	Bios interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--boot-interface <boot_interface></code>	Boot interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--console-interface <console_interface></code>	Console interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--deploy-interface <deploy_interface></code>	Deploy interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--inspect-interface <inspect_interface></code>	Inspect interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--management-interface <management_interface></code>	Management interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--network-interface <network_interface></code>	Network interface used for switching node to cleaning/provisioning networks.

Value	Summary
<code>--power-interface <power_interface></code>	Power interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--raid-interface <raid_interface></code>	Raid interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--rescue-interface <rescue_interface></code>	Rescue interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--storage-interface <storage_interface></code>	Storage interface used by the node's driver.
<code>--vendor-interface <vendor_interface></code>	Vendor interface used by the node's driver. this is only applicable when the specified <code>--driver</code> is a hardware type.
<code>--resource-class <resource_class></code>	Resource class for mapping nodes to nova flavors
<code>--conductor-group <conductor_group></code>	Conductor group the node will belong to
<code>--automated-clean</code>	Enable automated cleaning for the node
<code>--owner <owner></code>	Owner of the node.
<code>--description <description></code>	Description for the node.

Table 11.206. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 11.207. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.208. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.209. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.51. BAREMETAL NODE DELETE

Unregister baremetal node(s)

Usage:

```
openstack baremetal node delete [-h] <node> [<node> ...]
```

Table 11.210. Positional Arguments

Value	Summary
<node>	Node(s) to delete (name or uuid)

Table 11.211. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.52. BAREMETAL NODE DEPLOY

Set provision state of baremetal node to *deploy*

Usage:

```
openstack baremetal node deploy [-h] [--wait [<time-out>]]
                                [--config-drive <config-drive>]
                                <node>
```

Table 11.212. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.213. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, active. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.
--config-drive <config-drive>	A gzipped, base64-encoded configuration drive string OR the path to the configuration drive file OR the path to a directory containing the config drive files OR a JSON object to build config drive from. In case it's a directory, a config drive will be generated from it. In case it's a JSON object with optional keys meta_data , user_data and network_data , a config drive will be generated on the server side (see the bare metal API reference for more details).

11.53. BAREMETAL NODE INJECT NMI

Inject NMI to baremetal node

Usage:

```
openstack baremetal node inject nmi [-h] <node>
```

Table 11.214. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.215. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.54. BAREMETAL NODE INSPECT

Set provision state of baremetal node to *inspect*

Usage:

```
openstack baremetal node inspect [-h] [--wait [<time-out>]] <node>
```

Table 11.216. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.217. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, manageable. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

11.55. BAREMETAL NODE LIST

List baremetal nodes

Usage:

```
openstack baremetal node list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--limit <limit>] [--marker <node>]
                               [--sort <key>[:<direction>]]
                               [--maintenance | --no-maintenance]
                               [--fault <fault>]
                               [--associated | --unassociated]
                               [--provision-state <provision state>]
                               [--driver <driver>]
                               [--resource-class <resource class>]
```



```

[--conductor-group <conductor_group>]
[--conductor <conductor>]
[--chassis <chassis UUID>]
[--owner <owner>]
[--description-contains <description_contains>]
[--long | --fields <field> [<field> ...]]

```

Table 11.218. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of nodes to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <node>	Node uuid (for example, of the last node in the list from a previous request). Returns the list of nodes after this UUID.
--sort <key>[:<direction>]	Sort output by specified node fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
--maintenance	Limit list to nodes in maintenance mode
--no-maintenance	Limit list to nodes not in maintenance mode
--fault <fault>	List nodes in specified fault.
--associated	List only nodes associated with an instance.
--unassociated	List only nodes not associated with an instance.
--provision-state <provision state>	List nodes in specified provision state.
--driver <driver>	Limit list to nodes with driver <driver>
--resource-class <resource class>	Limit list to nodes with resource class <resource class>
--conductor-group <conductor_group>	Limit list to nodes with conductor group <conductor group>
--conductor <conductor>	Limit list to nodes with conductor <conductor>
--chassis <chassis UUID>	Limit list to nodes of this chassis

Value	Summary
<code>--owner <owner></code>	Limit list to nodes with owner <owner>
<code>--description-contains <description_contains></code>	Limit list to nodes with description contains <description_contains>
<code>--long</code>	Show detailed information about the nodes.
<code>--fields <field> [<field> ...]</code>	One or more node fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.

Table 11.219. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.220. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.221. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.222. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.56. BAREMETAL NODE MAINTENANCE SET

Set baremetal node to maintenance mode

Usage:

```
openstack baremetal node maintenance set [-h] [--reason <reason>]
<node>
```

Table 11.223. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.224. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--reason <reason>	Reason for setting maintenance mode.

11.57. BAREMETAL NODE MAINTENANCE UNSET

Unset baremetal node from maintenance mode

Usage:

```
openstack baremetal node maintenance unset [-h] <node>
```

Table 11.225. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.226. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.58. BAREMETAL NODE MANAGE

Set provision state of baremetal node to *manage*

Usage:

```
openstack baremetal node manage [-h] [--wait [<time-out>]] <node>
```

Table 11.227. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.228. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, manageable. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

11.59. BAREMETAL NODE PASSTHRU CALL

Call a vendor passthru method for a node

Usage:

```
openstack baremetal node passthru call [-h] [--arg <key=value>]
    [--http-method <http-method>]
    <node> <method>
```

Table 11.229. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<method>	Vendor passthru method to be executed

Table 11.230. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--arg <key=value>	Argument to pass to the passthru method (repeat option to specify multiple arguments)
--http-method <http-method>	The http method to use in the passthru request. one of DELETE, GET, PATCH, POST, PUT. Defaults to POST.

11.60. BAREMETAL NODE PASSTHRU LIST

List vendor passthru methods for a node

Usage:

```

openstack baremetal node passthru list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     <node>

```

Table 11.231. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.232. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.233. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.234. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.235. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.236. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.61. BAREMETAL NODE POWER OFF

Power off a node

Usage:

```
openstack baremetal node power off [-h]
                                   [--power-timeout <power-timeout>]
                                   [--soft]
                                   <node>
```

Table 11.237. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.238. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--power-timeout <power-timeout>	Timeout (in seconds, positive integer) to wait for the target power state before erroring out.
--soft	Request graceful power-off.

11.62. BAREMETAL NODE POWER ON

Power on a node

Usage:

```
openstack baremetal node power on [-h]
                                [--power-timeout <power-timeout>]
                                <node>
```

Table 11.239. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.240. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--power-timeout <power-timeout>	Timeout (in seconds, positive integer) to wait for the target power state before erroring out.

11.63. BAREMETAL NODE PROVIDE

Set provision state of baremetal node to *provide*

Usage:

```
openstack baremetal node provide [-h] [--wait [<time-out>]] <node>
```

Table 11.241. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.242. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, available. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

11.64. BAREMETAL NODE REBOOT

Reboot baremetal node

Usage:

```
openstack baremetal node reboot [-h] [--soft]
                                [--power-timeout <power-timeout>]
                                <node>
```

Table 11.243. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.244. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--soft	Request graceful reboot.
--power-timeout <power-timeout>	Timeout (in seconds, positive integer) to wait for the target power state before erroring out.

11.65. BAREMETAL NODE REBUILD

Set provision state of baremetal node to *rebuild*

Usage:


```
openstack baremetal node rebuild [-h] [--wait [<time-out>]]
                                [--config-drive <config-drive>]
                                <node>
```

Table 11.245. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.246. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, active. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.
--config-drive <config-drive>	A gzipped, base64-encoded configuration drive string OR the path to the configuration drive file OR the path to a directory containing the config drive files OR a JSON object to build config drive from. In case it's a directory, a config drive will be generated from it. In case it's a JSON object with optional keys meta_data , user_data and network_data , a config drive will be generated on the server side (see the bare metal API reference for more details).

11.66. BAREMETAL NODE REMOVE TRAIT

Remove trait(s) from a node.

Usage:

```
openstack baremetal node remove trait [-h] [--all]
                                       <node> [<trait> [<trait> ...]]
```

Table 11.247. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<trait>	Trait(s) to remove

Table 11.248. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Remove all traits

11.67. BAREMETAL NODE RESCUE

Set provision state of baremetal node to *rescue*

Usage:

```
openstack baremetal node rescue [-h] [--wait [<time-out>]]
    --rescue-password <rescue-password>
    <node>
```

Table 11.249. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.250. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, rescue. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.
--rescue-password <rescue-password>	The password that will be used to login to the rescue ramdisk. The value should be a non-empty string.

11.68. BAREMETAL NODE SET

Set baremetal properties

Usage:

```
openstack baremetal node set [-h] [--instance-uuid <uuid>]
    [--name <name>]
    [--chassis-uuid <chassis UUID>]
    [--driver <driver>]
    [--bios-interface <bios_interface> | --reset-bios-interface]
    [--boot-interface <boot_interface> | --reset-boot-interface]
    [--console-interface <console_interface> | --reset-console-interface]
    [--deploy-interface <deploy_interface> | --reset-deploy-interface]
```

```

interface]
[--inspect-interface <inspect_interface> | --reset-inspect-interface]
[--management-interface <management_interface> | --reset-management-
interface]
[--network-interface <network_interface> | --reset-network-interface]
[--power-interface <power_interface> | --reset-power-interface]
[--raid-interface <raid_interface> | --reset-raid-interface]
[--rescue-interface <rescue_interface> | --reset-rescue-interface]
[--storage-interface <storage_interface> | --reset-storage-interface]
[--vendor-interface <vendor_interface> | --reset-vendor-interface]
[--reset-interfaces]
[--resource-class <resource_class>]
[--conductor-group <conductor_group>]
[--automated-clean] [--protected]
[--protected-reason <protected_reason>]
[--target-raid-config <target_raid_config>]
[--property <key=value>]
[--extra <key=value>]
[--driver-info <key=value>]
[--instance-info <key=value>]
[--owner <owner>]
[--description <description>]
<node>

```

Table 11.251. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.252. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--instance-uuid <uuid>	Set instance uuid of node to <uuid>
--name <name>	Set the name of the node
--chassis-uuid <chassis UUID>	Set the chassis for the node
--driver <driver>	Set the driver for the node
--bios-interface <bios_interface>	Set the bios interface for the node
--reset-bios-interface	Reset the bios interface to its hardware type default
--boot-interface <boot_interface>	Set the boot interface for the node
--reset-boot-interface	Reset the boot interface to its hardware type default

Value	Summary
<code>--console-interface <console_interface></code>	Set the console interface for the node
<code>--reset-console-interface</code>	Reset the console interface to its hardware type default
<code>--deploy-interface <deploy_interface></code>	Set the deploy interface for the node
<code>--reset-deploy-interface</code>	Reset the deploy interface to its hardware type default
<code>--inspect-interface <inspect_interface></code>	Set the inspect interface for the node
<code>--reset-inspect-interface</code>	Reset the inspect interface to its hardware type default
<code>--management-interface <management_interface></code>	Set the management interface for the node
<code>--reset-management-interface</code>	Reset the management interface to its hardware type default
<code>--network-interface <network_interface></code>	Set the network interface for the node
<code>--reset-network-interface</code>	Reset the network interface to its hardware type default
<code>--power-interface <power_interface></code>	Set the power interface for the node
<code>--reset-power-interface</code>	Reset the power interface to its hardware type default
<code>--raid-interface <raid_interface></code>	Set the raid interface for the node
<code>--reset-raid-interface</code>	Reset the raid interface to its hardware type default
<code>--rescue-interface <rescue_interface></code>	Set the rescue interface for the node
<code>--reset-rescue-interface</code>	Reset the rescue interface to its hardware type default
<code>--storage-interface <storage_interface></code>	Set the storage interface for the node
<code>--reset-storage-interface</code>	Reset the storage interface to its hardware type default
<code>--vendor-interface <vendor_interface></code>	Set the vendor interface for the node

Value	Summary
<code>--reset-vendor-interface</code>	Reset the vendor interface to its hardware type default
<code>--reset-interfaces</code>	Reset all interfaces not specified explicitly to their default implementations. Only valid with <code>--driver</code> .
<code>--resource-class <resource_class></code>	Set the resource class for the node
<code>--conductor-group <conductor_group></code>	Set the conductor group for the node
<code>--automated-clean</code>	Enable automated cleaning for the node
<code>--protected</code>	Mark the node as protected
<code>--protected-reason <protected_reason></code>	Set the reason of marking the node as protected
<code>--target-raid-config <target_raid_config></code>	Set the target raid configuration (json) for the node. This can be one of: 1. a file containing JSON data of the RAID configuration; 2. "-" to read the contents from standard input; or 3. a valid JSON string.
<code>--property <key=value></code>	Property to set on this baremetal node (repeat option to set multiple properties)
<code>--extra <key=value></code>	Extra to set on this baremetal node (repeat option to set multiple extras)
<code>--driver-info <key=value></code>	Driver information to set on this baremetal node (repeat option to set multiple driver infos)
<code>--instance-info <key=value></code>	Instance information to set on this baremetal node (repeat option to set multiple instance infos)
<code>--owner <owner></code>	Set the owner for the node
<code>--description <description></code>	Set the description for the node

11.69. BAREMETAL NODE SHOW

Show baremetal node details

Usage:

```
openstack baremetal node show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--instance]
[--fields <field> [<field> ...]]
<node>

```

Table 11.253. Positional Arguments

Value	Summary
<code><node></code>	Name or uuid of the node (or instance uuid if <code>--instance</code> is specified)

Table 11.254. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--instance</code>	<code><node></code> is an instance uuid.
<code>--fields</code> <code><field></code> [<code><field></code> ...]	One or more node fields. only these fields will be fetched from the server.

Table 11.255. Output Formatters

Value	Summary
output formatter options- <code>f</code> { <code>json,shell,table,value,yaml</code> }, <code>--format</code> { <code>json,shell,table,value,yaml</code> }	The output format, defaults to table
<code>-c</code> COLUMN, <code>--column</code> COLUMN	Specify the column(s) to include, can be repeated

Table 11.256. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.257. Shell Formatter

Value	Summary
a format a UNIX shell can parse (<code>variable="value"</code>)-- prefix PREFIX	Add a prefix to all variable names

Table 11.258. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.70. BAREMETAL NODE TRAIT LIST

List a node's traits.

Usage:

```

openstack baremetal node trait list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent]
                                [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                <node>

```

Table 11.259. Positional Arguments

Value	Summary
<code><node></code>	Name or uuid of the node

Table 11.260. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 11.261. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.262. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.263. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.264. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.71. BAREMETAL NODE UNDEPLOY

Set provision state of baremetal node to *deleted*

Usage:

```
openstack baremetal node undeploy [-h] [--wait [<time-out>]] <node>
```

Table 11.265. Positional Arguments

Value	Summary
<code><node></code>	Name or uuid of the node.

Value	Summary
-------	---------

Table 11.266. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, available. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

11.72. BAREMETAL NODE UNRESCUE

Set provision state of baremetal node to *unrescue*

Usage:

```
openstack baremetal node unrescue [-h] [--wait [<time-out>]] <node>
```

Table 11.267. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.268. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait [<time-out>]	Wait for a node to reach the desired state, active. Optionally takes a timeout value (in seconds). The default value is 0, meaning it will wait indefinitely.

11.73. BAREMETAL NODE UNSET

Unset baremetal properties

Usage:

```
openstack baremetal node unset [-h] [--instance-uuid] [--name]
                                [--resource-class]
                                [--target-raid-config]
```

```

[--property <key>] [--extra <key>]
[--driver-info <key>]
[--instance-info <key>] [--chassis-uuid]
[--bios-interface] [--boot-interface]
[--console-interface]
[--deploy-interface]
[--inspect-interface]
[--management-interface]
[--network-interface]
[--power-interface] [--raid-interface]
[--rescue-interface]
[--storage-interface]
[--vendor-interface] [--conductor-group]
[--automated-clean] [--protected]
[--protected-reason] [--owner]
[--description]
<node>

```

Table 11.269. Positional Arguments

Value	Summary
<node>	Name or uuid of the node.

Table 11.270. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--instance-uuid	Unset instance uuid on this baremetal node
--name	Unset the name of the node
--resource-class	Unset the resource class of the node
--target-raid-config	Unset the target raid configuration of the node
--property <key>	Property to unset on this baremetal node (repeat option to unset multiple properties)
--extra <key>	Extra to unset on this baremetal node (repeat option to unset multiple extras)
--driver-info <key>	Driver information to unset on this baremetal node (repeat option to unset multiple driver informations)
--instance-info <key>	Instance information to unset on this baremetal node (repeat option to unset multiple instance informations)

Value	Summary
--chassis-uuid	Unset chassis uuid on this baremetal node
--bios-interface	Unset bios interface on this baremetal node
--boot-interface	Unset boot interface on this baremetal node
--console-interface	Unset console interface on this baremetal node
--deploy-interface	Unset deploy interface on this baremetal node
--inspect-interface	Unset inspect interface on this baremetal node
--management-interface	Unset management interface on this baremetal node
--network-interface	Unset network interface on this baremetal node
--power-interface	Unset power interface on this baremetal node
--raid-interface	Unset raid interface on this baremetal node
--rescue-interface	Unset rescue interface on this baremetal node
--storage-interface	Unset storage interface on this baremetal node
--vendor-interface	Unset vendor interface on this baremetal node
--conductor-group	Unset conductor group for this baremetal node (the default group will be used)
--automated-clean	Unset automated clean option on this baremetal node (the value from configuration will be used)
--protected	Unset the protected flag on the node
--protected-reason	Unset the protected reason (gets unset automatically when protected is unset)
--owner	Unset the owner field of the node
--description	Unset the description field of the node

11.74. BAREMETAL NODE VALIDATE

Validate a node's driver interfaces

Usage:

```

openstack baremetal node validate [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                <node>

```

Table 11.271. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.272. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.273. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.274. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.275. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.276. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.75. BAREMETAL NODE VIF ATTACH

Attach VIF to a given node

Usage:

```
openstack baremetal node vif attach [-h] [--vif-info <key=value>]
                                     <node> <vif-id>
```

Table 11.277. Positional Arguments

Value	Summary
<code><node></code>	Name or uuid of the node
<code><vif-id></code>	Name or uuid of the vif to attach to a node.

Table 11.278. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--vif-info <key=value></code>	Record arbitrary key/value metadata. can be specified multiple times. The mandatory <i>id</i> parameter cannot be specified as a key.

11.76. BAREMETAL NODE VIF DETACH

Detach VIF from a given node

Usage:

```
openstack baremetal node vif detach [-h] <node> <vif-id>
```

Table 11.279. Positional Arguments

Value	Summary
<node>	Name or uuid of the node
<vif-id>	Name or uuid of the vif to detach from a node.

Table 11.280. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.77. BAREMETAL NODE VIF LIST

Show attached VIFs for a node

Usage:

```
openstack baremetal node vif list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                <node>
```

Table 11.281. Positional Arguments

Value	Summary
<node>	Name or uuid of the node

Table 11.282. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 11.283. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.284. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.285. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.286. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.78. BAREMETAL PORT CREATE

Create a new port

Usage:

```
openstack baremetal port create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] --node <uuid>
                               [--uuid <uuid>] [--extra <key=value>]
                               [--local-link-connection <key=value>]
```

```

[-l <key=value>]
[--pxe-enabled <boolean>]
[--port-group <uuid>]
[--physical-network <physical network>]
[--is-smartnic]
<address>

```

Table 11.287. Positional Arguments

Value	Summary
<address>	Mac address for this port.

Table 11.288. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Uuid of the node that this port belongs to.
--uuid <uuid>	Uuid of the port.
--extra <key=value>	Record arbitrary key/value metadata. argument can be specified multiple times.
--local-link-connection <key=value>	Key/value metadata describing local link connection information. Valid keys are <i>switch_info</i> , <i>switch_id</i> , <i>port_id</i> and <i>hostname</i> . The keys <i>switch_id</i> and <i>port_id</i> are required. In case of a Smart NIC port, the required keys are <i>port_id</i> and <i>hostname</i> . Argument can be specified multiple times.
-l <key=value>	Deprecated. please use --local-link-connection instead. Key/value metadata describing Local link connection information. Valid keys are <i>switch_info</i> , <i>switch_id</i> , and <i>port_id</i> . The keys <i>switch_id</i> and <i>port_id</i> are required. Can be specified multiple times.
--pxe-enabled <boolean>	Indicates whether this port should be used when pxe booting this Node.
--port-group <uuid>	Uuid of the port group that this port belongs to.
--physical-network <physical network>	Name of the physical network to which this port is connected.
--is-smartnic	Indicates whether this port is a smart nic port

Table 11.289. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.290. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.291. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.292. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.79. BAREMETAL PORT DELETE

Delete port(s).

Usage:

```
openstack baremetal port delete [-h] <port> [<port> ...]
```

Table 11.293. Positional Arguments

Value	Summary
<port>	Uuid(s) of the port(s) to delete.

Table 11.294. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.80. BAREMETAL PORT GROUP CREATE

Create a new baremetal port group.

Usage:

```

openstack baremetal port group create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     --node <uuid>
                                     [--address <mac-address>]
                                     [--name NAME] [--uuid UUID]
                                     [--extra <key=value>]
                                     [--mode MODE]
                                     [--property <key=value>]
                                     [--support-standalone-ports | --unsupport-standalone-ports]

```

Table 11.295. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Uuid of the node that this port group belongs to.
--address <mac-address>	Mac address for this port group.
--name NAME	Name of the port group.
--uuid UUID	Uuid of the port group.
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.

Value	Summary
<code>--mode MODE</code>	Mode of the port group. for possible values, refer to https://www.kernel.org/doc/Documentation/networking/bonding.txt .
<code>--property <key=value></code>	Key/value property related to this port group's configuration. Can be specified multiple times.
<code>--support-standalone-ports</code>	Ports that are members of this port group can be used as stand-alone ports. (default)
<code>--unsupport-standalone-ports</code>	Ports that are members of this port group cannot be used as stand-alone ports.

Table 11.296. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 11.297. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.298. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 11.299. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.81. BAREMETAL PORT GROUP DELETE

Unregister baremetal port group(s).

Usage:

```
openstack baremetal port group delete [-h]
                                     <port group> [<port group> ...]
```

Table 11.300. Positional Arguments

Value	Summary
<port group>	Port group(s) to delete (name or uuid).

Table 11.301. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.82. BAREMETAL PORT GROUP LIST

List baremetal port groups.

Usage:

```
openstack baremetal port group list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--limit <limit>]
                                     [--marker <port group>]
                                     [--sort <key>[:<direction>]]
                                     [--address <mac-address>]
                                     [--node <node>]
                                     [--long | --fields <field> [<field> ...]]
```

Table 11.302. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of port groups to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <port group>	Port group uuid (for example, of the last port group in the list from a previous request). Returns the list of port groups after this UUID.
--sort <key>[:<direction>]	Sort output by specified port group fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
--address <mac-address>	Only show information for the port group with this mac address.
--node <node>	Only list port groups of this node (name or uuid).
--long	Show detailed information about the port groups.
--fields <field> [<field> ...]	One or more port group fields. only these fields will be fetched from the server. Can not be used when <i>--long</i> is specified.

Table 11.303. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.304. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.305. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.306. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.83. BAREMETAL PORT GROUP SET

Set baremetal port group properties.

Usage:

```
openstack baremetal port group set [-h] [--node <uuid>]
    [--address <mac-address>]
    [--name <name>]
    [--extra <key=value>] [--mode MODE]
    [--property <key=value>]
    [--support-standalone-ports | --unsupport-standalone-ports]
    <port group>
```

Table 11.307. Positional Arguments

Value	Summary
<port group>	Name or uuid of the port group.

Table 11.308. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Update uuid of the node that this port group belongs to.

Value	Summary
<code>--address <mac-address></code>	Mac address for this port group.
<code>--name <name></code>	Name of the port group.
<code>--extra <key=value></code>	Extra to set on this baremetal port group (repeat option to set multiple extras).
<code>--mode MODE</code>	Mode of the port group. for possible values, refer to https://www.kernel.org/doc/Documentation/networking/bonding.txt .
<code>--property <key=value></code>	Key/value property related to this port group's configuration (repeat option to set multiple properties).
<code>--support-standalone-ports</code>	Ports that are members of this port group can be used as stand-alone ports.
<code>--unsupport-standalone-ports</code>	Ports that are members of this port group cannot be used as stand-alone ports.

11.84. BAREMETAL PORT GROUP SHOW

Show baremetal port group details.

Usage:

```
openstack baremetal port group show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--address]
                                     [--fields <field> [<field> ...]]
                                     <id>
```

Table 11.309. Positional Arguments

Value	Summary
<code><id></code>	Uuid or name of the port group (or mac address if <code>--address</code> is specified).

Table 11.310. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--address	<id> is the mac address (instead of uuid or name) of the port group.
--fields <field> [<field> ...]	One or more port group fields. only these fields will be fetched from the server.

Table 11.311. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.312. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.313. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.314. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.85. BAREMETAL PORT GROUP UNSET

Unset baremetal port group properties.

Usage:

```
openstack baremetal port group unset [-h] [--name] [--address]
                                     [--extra <key>] [--property <key>]
                                     <port group>
```

Table 11.315. Positional Arguments

Value	Summary
<port group>	Name or uuid of the port group.

Table 11.316. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name	Unset the name of the port group.
--address	Unset the address of the port group.
--extra <key>	Extra to unset on this baremetal port group (repeat option to unset multiple extras).
--property <key>	Property to unset on this baremetal port group (repeat option to unset multiple properties).

11.86. BAREMETAL PORT LIST

List baremetal ports.

Usage:

```
openstack baremetal port list [-h] [-f {csv,json,table,value,yaml}]
                              [-c COLUMN]
                              [--quote {all,minimal,none,nonnumeric}]
                              [--noindent] [--max-width <integer>]
                              [--fit-width] [--print-empty]
                              [--sort-column SORT_COLUMN]
                              [--address <mac-address>] [--node <node>]
                              [--port-group <port group>]
                              [--limit <limit>] [--marker <port>]
                              [--sort <key>[:<direction>]]
                              [--long | --fields <field> [<field> ...]]
```

Table 11.317. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--address <mac-address>	Only show information for the port with this mac address.
--node <node>	Only list ports of this node (name or uuid).
--port-group <port group>	Only list ports of this port group (name or uuid).
--limit <limit>	Maximum number of ports to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <port>	Port uuid (for example, of the last port in the list from a previous request). Returns the list of ports after this UUID.
--sort <key>[:<direction>]	Sort output by specified port fields and directions (asc or desc) (default: asc). Multiple fields and directions can be specified, separated by comma.
--long	Show detailed information about ports.
--fields <field> [<field> ...]	One or more port fields. only these fields will be fetched from the server. Can not be used when <i>--long</i> is specified.

Table 11.318. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.319. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.320. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.321. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.87. BAREMETAL PORT SET

Set baremetal port properties.

Usage:

```
openstack baremetal port set [-h] [--node <uuid>] [--address <address>]
                             [--extra <key=value>]
                             [--port-group <uuid>]
                             [--local-link-connection <key=value>]
                             [--pxe-enabled | --pxe-disabled]
                             [--physical-network <physical network>]
                             [--is-smartnic]
                             <port>
```

Table 11.322. Positional Arguments

Value	Summary
<code><port></code>	Uuid of the port

Table 11.323. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Set uuid of the node that this port belongs to
--address <address>	Set mac address for this port
--extra <key=value>	Extra to set on this baremetal port (repeat option to set multiple extras)
--port-group <uuid>	Set uuid of the port group that this port belongs to.
--local-link-connection <key=value>	Key/value metadata describing local link connection information. Valid keys are <i>switch_info</i> , <i>switch_id</i> , <i>port_id</i> and <i>hostname</i> . The keys <i>switch_id</i> and <i>port_id</i> are required. In case of a Smart NIC port, the required keys are <i>port_id</i> and <i>hostname</i> . Argument can be specified multiple times.
--pxe-enabled	Indicates that this port should be used when pxe booting this node (default)
--pxe-disabled	Indicates that this port should not be used when pxe booting this node
--physical-network <physical network>	Set the name of the physical network to which this port is connected.
--is-smartnic	Set port to be smart nic port

11.88. BAREMETAL PORT SHOW

Show baremetal port details.

Usage:

```
openstack baremetal port show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty] [--address]
                             [--fields <field> [<field> ...]]
                             <id>
```

Table 11.324. Positional Arguments

Value	Summary
-------	---------

Value	Summary
<id>	Uuid of the port (or mac address if --address is specified).

Table 11.325. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--address	<id> is the mac address (instead of the uuid) of the port.
--fields <field> [<field> ...]	One or more port fields. only these fields will be fetched from the server.

Table 11.326. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.327. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.328. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.329. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.89. BAREMETAL PORT UNSET

Unset baremetal port properties.

Usage:

```
openstack baremetal port unset [-h] [--extra <key>] [--port-group]
                               [--physical-network] [--is-smartnic]
                               <port>
```

Table 11.330. Positional Arguments

Value	Summary
<code><port></code>	Uuid of the port.

Table 11.331. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--extra <key></code>	Extra to unset on this baremetal port (repeat option to unset multiple extras)
<code>--port-group</code>	Remove port from the port group
<code>--physical-network</code>	Unset the physical network on this baremetal port.
<code>--is-smartnic</code>	Set port as not smart nic port

11.90. BAREMETAL VOLUME CONNECTOR CREATE

Create a new baremetal volume connector.

Usage:

```

openstack baremetal volume connector create [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN] [--noindent]
                                           [--prefix PREFIX]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty] --node
                                           <uuid> --type <type>
                                           --connector-id <connector
                                           id> [--uuid <uuid>]
                                           [--extra <key=value>]

```

Table 11.332. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Uuid of the node that this volume connector belongs to.
--type <type>	Type of the volume connector. can be <i>iqn</i> , <i>ip</i> , <i>mac</i> , <i>wwnn</i> , <i>wwpn</i> , <i>port</i> , <i>portgroup</i> .
--connector-id <connector id>	Id of the volume connector in the specified type. for example, the iSCSI initiator IQN for the node if the type is <i>iqn</i> .
--uuid <uuid>	Uuid of the volume connector.
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.

Table 11.333. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.334. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.335. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.336. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.91. BAREMETAL VOLUME CONNECTOR DELETE

Unregister baremetal volume connector(s).

Usage:

```
openstack baremetal volume connector delete [-h]
      <volume connector>
      [<volume connector> ...]
```

Table 11.337. Positional Arguments

Value	Summary
<volume connector>	Uuid(s) of the volume connector(s) to delete.

Table 11.338. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.92. BAREMETAL VOLUME CONNECTOR LIST

List baremetal volume connectors.

Usage:


```

openstack baremetal volume connector list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--node <node>]
                                         [--limit <limit>]
                                         [--marker <volume connector>]
                                         [--sort <key>[:<direction>]]
                                         [--long | --fields <field> [<field> ...]]

```

Table 11.339. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node <node>	Only list volume connectors of this node (name or UUID).
--limit <limit>	Maximum number of volume connectors to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
--marker <volume connector>	Volume connector uuid (for example, of the last volume connector in the list from a previous request). Returns the list of volume connectors after this UUID.
--sort <key>[:<direction>]	Sort output by specified volume connector fields and directions (asc or desc) (default:asc). Multiple fields and directions can be specified, separated by comma.
--long	Show detailed information about volume connectors.
--fields <field> [<field> ...]	One or more volume connector fields. only these fields will be fetched from the server. Can not be used when <i>--long</i> is specified.

Table 11.340. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.341. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 11.342. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.343. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.93. BAREMETAL VOLUME CONNECTOR SET

Set baremetal volume connector properties.

Usage:

```

openstack baremetal volume connector set [-h] [--node <uuid>]
                                         [--type <type>]
                                         [--connector-id <connector id>]
                                         [--extra <key=value>]
                                         <volume connector>

```

Table 11.344. Positional Arguments

Value	Summary
<volume connector>	Uuid of the volume connector.

Table 11.345. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Uuid of the node that this volume connector belongs to.
--type <type>	Type of the volume connector. can be <i>iqn</i> , <i>ip</i> , <i>mac</i> , <i>wwnn</i> , <i>wwpn</i> , <i>port</i> , <i>portgroup</i> .
--connector-id <connector id>	Id of the volume connector in the specified type.
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.

11.94. BAREMETAL VOLUME CONNECTOR SHOW

Show baremetal volume connector details.

Usage:

```
openstack baremetal volume connector show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--fields <field> [<field> ...]]
                                         <id>
```

Table 11.346. Positional Arguments

Value	Summary
<id>	Uuid of the volume connector.

Table 11.347. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--fields <field> [<field> ...]</code>	One or more volume connector fields. only these fields will be fetched from the server.

Table 11.348. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 11.349. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.350. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 11.351. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.95. BAREMETAL VOLUME CONNECTOR UNSET

Unset baremetal volume connector properties.

Usage:

```
openstack baremetal volume connector unset [-h] [--extra <key>]
<volume connector>
```

Table 11.352. Positional Arguments

Value	Summary
<volume connector>	Uuid of the volume connector.

Table 11.353. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--extra <key>	Extra to unset (repeat option to unset multiple extras)

11.96. BAREMETAL VOLUME TARGET CREATE

Create a new baremetal volume target.

Usage:

```
openstack baremetal volume target create [-h]
[-f {json,shell,table,value,yaml}]
[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
--node <uuid> --type <volume
type> [--property <key=value>]
--boot-index <boot index>
--volume-id <volume id>
[--uuid <uuid>]
[--extra <key=value>]
```

Table 11.354. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Uuid of the node that this volume target belongs to.
--type <volume type>	Type of the volume target, e.g. <i>iscsi</i> , <i>fibres_channel</i> .

Value	Summary
<code>--property <key=value></code>	Key/value property related to the type of this volume target. Can be specified multiple times.
<code>--boot-index <boot index></code>	Boot index of the volume target.
<code>--volume-id <volume id></code>	Id of the volume associated with this target.
<code>--uuid <uuid></code>	Uuid of the volume target.
<code>--extra <key=value></code>	Record arbitrary key/value metadata. can be specified multiple times.

Table 11.355. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 11.356. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.357. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.358. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.97. BAREMETAL VOLUME TARGET DELETE

Unregister baremetal volume target(s).

Usage:

```
openstack baremetal volume target delete [-h]
                                     <volume target>
                                     [<volume target> ...]
```

Table 11.359. Positional Arguments

Value	Summary
<volume target>	Uuid(s) of the volume target(s) to delete.

Table 11.360. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

11.98. BAREMETAL VOLUME TARGET LIST

List baremetal volume targets.

Usage:

```
openstack baremetal volume target list [-h]
                                       [-f {csv,json,table,value,yaml}]
                                       [-c COLUMN]
                                       [--quote {all,minimal,none,nonnumeric}]
                                       [--noindent]
                                       [--max-width <integer>]
                                       [--fit-width] [--print-empty]
                                       [--sort-column SORT_COLUMN]
                                       [--node <node>]
                                       [--limit <limit>]
```

```

[--marker <volume target>]
[--sort <key>[:<direction>]]
[--long | --fields <field> [<field> ...]]

```

Table 11.361. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--node <node></code>	Only list volume targets of this node (name or uuid).
<code>--limit <limit></code>	Maximum number of volume targets to return per request, 0 for no limit. Default is the maximum number used by the Baremetal API Service.
<code>--marker <volume target></code>	Volume target uuid (for example, of the last volume target in the list from a previous request). Returns the list of volume targets after this UUID.
<code>--sort <key>[:<direction>]</code>	Sort output by specified volume target fields and directions (asc or desc) (default:asc). Multiple fields and directions can be specified, separated by comma.
<code>--long</code>	Show detailed information about volume targets.
<code>--fields <field> [<field> ...]</code>	One or more volume target fields. only these fields will be fetched from the server. Can not be used when <code>--long</code> is specified.

Table 11.362. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 11.363. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 11.364. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 11.365. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

11.99. BAREMETAL VOLUME TARGET SET

Set baremetal volume target properties.

Usage:

```
openstack baremetal volume target set [-h] [--node <uuid>]
                                     [--type <volume type>]
                                     [--property <key=value>]
                                     [--boot-index <boot index>]
                                     [--volume-id <volume id>]
                                     [--extra <key=value>]
                                     <volume target>
```

Table 11.366. Positional Arguments

Value	Summary
<code><volume target></code>	Uuid of the volume target.

Table 11.367. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node <uuid>	Uuid of the node that this volume target belongs to.
--type <volume type>	Type of the volume target, e.g. <i>iscsi</i> , <i>fibre_channel</i> .
--property <key=value>	Key/value property related to the type of this volume target. Can be specified multiple times.
--boot-index <boot index>	Boot index of the volume target.
--volume-id <volume id>	Id of the volume associated with this target.
--extra <key=value>	Record arbitrary key/value metadata. can be specified multiple times.

11.100. BAREMETAL VOLUME TARGET SHOW

Show baremetal volume target details.

Usage:

```

openstack baremetal volume target show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--fields <field> [<field> ...]]
                                     <id>

```

Table 11.368. Positional Arguments

Value	Summary
<id>	Uuid of the volume target.

Table 11.369. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fields <field> [<field> ...]	One or more volume target fields. only these fields will be fetched from the server.

Table 11.370. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 11.371. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 11.372. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 11.373. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

11.101. BAREMETAL VOLUME TARGET UNSET

Unset baremetal volume target properties.

Usage:

```
openstack baremetal volume target unset [-h] [--extra <key>]
                                     [--property <key>]
                                     <volume target>
```

Table 11.374. Positional Arguments

Value	Summary
<volume target>	Uuid of the volume target.

Table 11.375. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--extra <key>	Extra to unset (repeat option to unset multiple extras)
--property <key>	Property to unset on this baremetal volume target (repeat option to unset multiple properties).

CHAPTER 12. BGP

This chapter describes the commands under the **bgp** command.

12.1. BGP DRAGENT ADD SPEAKER

Add a BGP speaker to a dynamic routing agent

Usage:

```
openstack bgp dragent add speaker [-h] <agent-id> <bgp-speaker>
```

Table 12.1. Positional Arguments

Value	Summary
<agent-id>	Id of the dynamic routing agent
<bgp-speaker>	Id or name of the bgp speaker

Table 12.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

12.2. BGP DRAGENT REMOVE SPEAKER

Removes a BGP speaker from a dynamic routing agent

Usage:

```
openstack bgp dragent remove speaker [-h] <agent-id> <bgp-speaker>
```

Table 12.3. Positional Arguments

Value	Summary
<agent-id>	Id of the dynamic routing agent
<bgp-speaker>	Id or name of the bgp speaker

Table 12.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

12.3. BGP PEER CREATE

Create a BGP peer

Usage:

```
openstack bgp peer create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] --peer-ip <peer-ip-address>
                          --remote-as <peer-remote-as>
                          [--auth-type <peer-auth-type>]
                          [--password <auth-password>]
                          [--project <project>]
                          [--project-domain <project-domain>]
                          <name>
```

Table 12.5. Positional Arguments

Value	Summary
<name>	Name of the bgp peer to create

Table 12.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--peer-ip <peer-ip-address>	Peer ip address
--remote-as <peer-remote-as>	Peer as number. (integer in [1, 65535] is allowed)
--auth-type <peer-auth-type>	Authentication algorithm. supported algorithms: none (default), md5
--password <auth-password>	Authentication password
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 12.7. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 12.8. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 12.9. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 12.10. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

12.4. BGP PEER DELETE

Delete a BGP peer

Usage:

```
openstack bgp peer delete [-h] <bgp-peer>
```

Table 12.11. Positional Arguments

Value	Summary
<bgp-peer>	Bgp peer to delete (name or id)

Table 12.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

12.5. BGP PEER LIST

List BGP peers

Usage:

```

openstack bgp peer list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]

```

Table 12.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 12.14. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 12.15. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 12.16. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 12.17. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

12.6. BGP PEER SET

Update a BGP peer

Usage:

```
openstack bgp peer set [-h] [--name NAME] [--password <auth-password>]
                        <bgp-peer>
```

Table 12.18. Positional Arguments

Value	Summary
<code><bgp-peer></code>	Bgp peer to update (name or id)

Table 12.19. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name NAME</code>	Updated name of the bgp peer

Value	Summary
<code>--password <auth-password></code>	Updated authentication password

12.7. BGP PEER SHOW

Show information for a BGP peer

Usage:

```
openstack bgp peer show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <bgp-peer>
```

Table 12.20. Positional Arguments

Value	Summary
<code><bgp-peer></code>	Bgp peer to display (name or id)

Table 12.21. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 12.22. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 12.23. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 12.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 12.25. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

12.8. BGP SPEAKER ADD NETWORK

Add a network to a BGP speaker

Usage:

```
openstack bgp speaker add network [-h] <bgp-speaker> <network>
```

Table 12.26. Positional Arguments

Value	Summary
<bgp-speaker>	Bgp speaker (name or id)
<network>	Network to add (name or id)

Table 12.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

12.9. BGP SPEAKER ADD PEER

Add a peer to a BGP speaker

Usage:

```
openstack bgp speaker add peer [-h] <bgp-speaker> <bgp-peer>
```

Table 12.28. Positional Arguments

Value	Summary
<bgp-speaker>	Bgp speaker (name or id)
<bgp-peer>	Bgp peer to add (name or id)

Table 12.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

12.10. BGP SPEAKER CREATE

Create a BGP speaker

Usage:

```
openstack bgp speaker create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] --local-as <local-as>
                             [--ip-version {4,6}]
                             [--advertise-floating-ip-host-routes]
                             [--no-advertise-floating-ip-host-routes]
                             [--advertise-tenant-networks]
                             [--no-advertise-tenant-networks]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             <name>
```

Table 12.30. Positional Arguments

Value	Summary
<name>	Name of the bgp speaker to create

Table 12.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--local-as <local-as>	Local as number. (integer in [1, 65535] is allowed.)

Value	Summary
<code>--ip-version {4,6}</code>	Ip version for the bgp speaker (default is 4)
<code>--advertise-floating-ip-host-routes</code>	Enable the advertisement of floating ip host routes by the BGP speaker. (default)
<code>--no-advertise-floating-ip-host-routes</code>	Disable the advertisement of floating ip host routes by the BGP speaker.
<code>--advertise-tenant-networks</code>	Enable the advertisement of tenant network routes by the BGP speaker. (default)
<code>--no-advertise-tenant-networks</code>	Disable the advertisement of tenant network routes by the BGP speaker.
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 12.32. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 12.33. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 12.34. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 12.35. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

12.11. BGP SPEAKER DELETE

Delete a BGP speaker

Usage:

```
openstack bgp speaker delete [-h] <bgp-speaker>
```

Table 12.36. Positional Arguments

Value	Summary
<code><bgp-speaker></code>	Bgp speaker to delete (name or id)

Table 12.37. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

12.12. BGP SPEAKER LIST ADVERTISED ROUTES

List routes advertised

Usage:

```
openstack bgp speaker list advertised routes [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         <bgp-speaker>
```

Table 12.38. Positional Arguments

Value	Summary
<bgp-speaker>	Bgp speaker (name or id)

Table 12.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 12.40. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 12.41. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 12.42. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 12.43. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

12.13. BGP SPEAKER LIST

List BGP speakers

Usage:

```
openstack bgp speaker list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--agent <agent-id>]
```

Table 12.44. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--agent <agent-id>	List bgp speakers hosted by an agent (id only)

Table 12.45. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 12.46. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 12.47. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 12.48. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

12.14. BGP SPEAKER REMOVE NETWORK

Remove a network from a BGP speaker

Usage:

```
openstack bgp speaker remove network [-h] <bgp-speaker> <network>
```

Table 12.49. Positional Arguments

Value	Summary
<code><bgp-speaker></code>	Bgp speaker (name or id)
<code><network></code>	Network to remove (name or id)

Table 12.50. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

12.15. BGP SPEAKER REMOVE PEER

Remove a peer from a BGP speaker

Usage:

```
openstack bgp speaker remove peer [-h] <bgp-speaker> <bgp-peer>
```

Table 12.51. Positional Arguments

Value	Summary
<bgp-speaker>	Bgp speaker (name or id)
<bgp-peer>	Bgp peer to remove (name or id)

Table 12.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

12.16. BGP SPEAKER SET

Set BGP speaker properties

Usage:

```
openstack bgp speaker set [-h] [--name NAME]
                        [--advertise-floating-ip-host-routes]
                        [--no-advertise-floating-ip-host-routes]
                        [--advertise-tenant-networks]
                        [--no-advertise-tenant-networks]
                        <bgp-speaker>
```

Table 12.53. Positional Arguments

Value	Summary
<bgp-speaker>	Bgp speaker to update (name or id)

Table 12.54. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Name of the bgp speaker to update

Value	Summary
<code>--advertise-floating-ip-host-routes</code>	Enable the advertisement of floating ip host routes by the BGP speaker. (default)
<code>--no-advertise-floating-ip-host-routes</code>	Disable the advertisement of floating ip host routes by the BGP speaker.
<code>--advertise-tenant-networks</code>	Enable the advertisement of tenant network routes by the BGP speaker. (default)
<code>--no-advertise-tenant-networks</code>	Disable the advertisement of tenant network routes by the BGP speaker.

12.17. BGP SPEAKER SHOW DRAGENTS

List dynamic routing agents hosting a BGP speaker

Usage:

```
openstack bgp speaker show dragents [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     <bgp-speaker>
```

Table 12.55. Positional Arguments

Value	Summary
<code><bgp-speaker></code>	Id or name of the bgp speaker

Table 12.56. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 12.57. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 12.58. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 12.59. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 12.60. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

12.18. BGP SPEAKER SHOW

Show a BGP speaker

Usage:

```
openstack bgp speaker show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
```

```
[--print-empty]
<bgp-speaker>
```

Table 12.61. Positional Arguments

Value	Summary
<bgp-speaker>	Bgp speaker to display (name or id)

Table 12.62. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 12.63. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 12.64. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 12.65. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 12.66. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 13. BGPVPN

This chapter describes the commands under the **bgpvpn** command.

13.1. BGPVPN CREATE

Create BGP VPN resource

Usage:

```
openstack bgpvpn create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--project <project>]
                        [--project-domain <project-domain>]
                        [--name <name>] [--route-target <route-target>]
                        [--import-target <import-target>]
                        [--export-target <export-target>]
                        [--route-distinguisher <route-distinguisher>]
                        [--vni VNI] [--local-pref LOCAL_PREF]
                        [--type {I2,I3}]
```

Table 13.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--name <name>	Name of the bgp vpn
--route-target <route-target>	Add route target to import/export list (repeat option for multiple Route Targets)
--import-target <import-target>	Add route target to import list (repeat option for multiple Route Targets)
--export-target <export-target>	Add route target to export list (repeat option for multiple Route Targets)
--route-distinguisher <route-distinguisher>	Add route distinguisher to the list of route Distinguishers from which a Route Distinguishers will be picked from to advertise a VPN route (repeat option for multiple Route Distinguishers)

Value	Summary
--vni VNI	Vxlan network identifier to be used for this bgpvpn when a VXLAN encapsulation is used
--local-pref LOCAL_PREF	Default bgp local_pref to use in route advertisementstowards this BGPVPN.
--type {I2,I3}	Bgp vpn type selection between ip vpn (I3) and Ethernet VPN (I2) (default: I3)

Table 13.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 13.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 13.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

13.2. BGPVPN DELETE

Delete BGP VPN resource(s)

Usage:

```
openstack bgpvpn delete [-h] <bgpvpn> [<bgpvpn> ...]
```

Table 13.6. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn(s) to delete (name or id)

Table 13.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

13.3. BGPVPN LIST

List BGP VPN resources

Usage:

```
openstack bgpvpn list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
  [--quote {all,minimal,none,nonnumeric}]
  [--noindent] [--max-width <integer>]
  [--fit-width] [--print-empty]
  [--sort-column SORT_COLUMN] [--project <project>]
  [--project-domain <project-domain>] [--long]
  [--property <key=value>]
```

Table 13.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--long	List additional fields in output

Value	Summary
<code>--property <key=value></code>	Filter property to apply on returned bgp vpns (repeat to filter on multiple properties)

Table 13.9. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 13.10. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 13.11. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 13.12. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

13.4. BGPVPN NETWORK ASSOCIATION CREATE

Create a BGP VPN network association

Usage:

```
openstack bgpvpn network association create [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN] [--noindent]
                                           [--prefix PREFIX]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty]
                                           [--project <project>]
                                           [--project-domain <project-domain>]
                                           <bgpvpn> <network>
```

Table 13.13. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn to apply the network association (name or id)
<network>	Network to associate the bgp vpn (name or id)

Table 13.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 13.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 13.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.17. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 13.18. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

13.5. BGPVPN NETWORK ASSOCIATION DELETE

Delete a BGP VPN network association(s) for a given BGP VPN

Usage:

```
openstack bgpvpn network association delete [-h]
                                     <network association ID>
                                     [<network association ID> ...]
                                     <bgpvpn>
```

Table 13.19. Positional Arguments

Value	Summary
<network association ID>	Network association id(s) to remove
<bgpvpn>	Bgp vpn the network association belongs to (name or ID)

Table 13.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

13.6. BGPVPN NETWORK ASSOCIATION LIST

List BGP VPN network associations for a given BGP VPN

Usage:

```

openstack bgpvpn network association list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--long]
                                     [--property <key=value>]
                                     <bgpvpn>

```

Table 13.21. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn listed associations belong to (name or id)

Table 13.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--property <key=value>	Filter property to apply on returned bgp vpns (repeat to filter on multiple properties)

Table 13.23. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 13.24. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 13.25. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 13.26. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

13.7. BGPVPN NETWORK ASSOCIATION SHOW

Show information of a given BGP VPN network association

Usage:

```

openstack bgpvpn network association show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         <network association ID>
                                         <bgpvpn>

```

Table 13.27. Positional Arguments

Value	Summary
<network association ID>	Network association id to look up
<bgpvpn>	Bgp vpn the association belongs to (name or id)

Table 13.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 13.29. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 13.30. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.31. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 13.32. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

13.8. BGPVPN PORT ASSOCIATION CREATE

Create a BGP VPN port association

Usage:

```

openstack bgpvpn port association create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--project <project>]
                                         [--project-domain <project-domain>]
                                         [--advertise-fixed-ips | --no-advertise-fixed-ips]
                                         [--prefix-route prefix=<cidr>[,local_pref=<integer>]]
                                         [--bgpvpn-route bgpvpn=<BGP VPN ID or name>[,local_pref=
<integer>]]
                                         <bgpvpn> <port>

```

Table 13.33. Positional Arguments

Value	Summary
<code><bgpvpn></code>	Bgp vpn to apply the port association (name or id)
<code><port></code>	Port to associate the bgp vpn (name or id)

Table 13.34. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--advertise-fixed-ips</code>	Fixed ips of the port will be advertised to the bgp VPN (default)
<code>--no-advertise-fixed-ips</code>	Fixed ips of the port will not be advertised to the BGP VPN

Value	Summary
<code>--prefix-route prefix=<cidr>[,local_pref=<integer>]</code>	Add prefix route in cidr notation. optionally, can control the value of the BGP LOCAL_PREF of the routes that will be advertised (repeat option for multiple prefix routes)
<code>--bgpvpn-route bgpvpn=<BGP VPN ID or name> [,local_pref=<integer>]</code>	Add bgp vpn route for route leaking. optionally, can control the value of the BGP LOCAL_PREF of the routes that will be advertised (repeat option for multiple BGP VPN routes)

Table 13.35. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 13.36. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 13.37. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

Table 13.38. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

13.9. BGPVPN PORT ASSOCIATION DELETE

Delete a BGP VPN port association(s) for a given BGP VPN

Usage:

```
openstack bgpvpn port association delete [-h]
                                         <port association ID>
                                         [<port association ID> ...]
                                         <bgpvpn>
```

Table 13.39. Positional Arguments

Value	Summary
<code><port association ID></code>	Port association id(s) to remove
<code><bgpvpn></code>	Bgp vpn the port association belongs to (name or id)

Table 13.40. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

13.10. BGPVPN PORT ASSOCIATION LIST

List BGP VPN port associations for a given BGP VPN

Usage:

```
openstack bgpvpn port association list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--long]
                                         [--property <key=value>]
                                         <bgpvpn>
```

Table 13.41. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn listed associations belong to (name or id)

Table 13.42. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--property <key=value>	Filter property to apply on returned bgp vpns (repeat to filter on multiple properties)

Table 13.43. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 13.44. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 13.45. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.46. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

13.11. BGPVPN PORT ASSOCIATION SET

Set BGP VPN port association properties

Usage:

```

openstack bgpvpn port association set [-h]
                                     [--advertise-fixed-ips | --no-advertise-fixed-ips]
                                     [--prefix-route prefix=<cidr>[,local_pref=<integer>]]
                                     [--bgpvpn-route bgpvpn=<BGP VPN ID or name>[,local_pref=<integer>]]
                                     [--no-prefix-route]
                                     [--no-bgpvpn-route]
                                     <port association ID> <bgpvpn>

```

Table 13.47. Positional Arguments

Value	Summary
<code><port association ID></code>	Port association id to update
<code><bgpvpn></code>	Bgp vpn the port association belongs to (name or id)

Table 13.48. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--advertise-fixed-ips</code>	Fixed ips of the port will be advertised to the bgp VPN
<code>--no-advertise-fixed-ips</code>	Fixed ips of the port will not be advertised to the BGP VPN

Value	Summary
<code>--prefix-route prefix=<cidr>[,local_pref=<integer>]</code>	Add prefix route in cidr notation. optionally, can control the value of the BGP LOCAL_PREF of the routes that will be advertised (repeat option for multiple prefix routes)
<code>--bgpvpn-route bgpvpn=<BGP VPN ID or name> [,local_pref=<integer>]</code>	Add bgp vpn route for route leaking. optionally, can control the value of the BGP LOCAL_PREF of the routes that will be advertised (repeat option for multiple BGP VPN routes)
<code>--no-prefix-route</code>	Empty prefix route list
<code>--no-bgpvpn-route</code>	Empty bgp vpn route list

13.12. BGPVPN PORT ASSOCIATION SHOW

Show information of a given BGP VPN port association

Usage:

```
openstack bgpvpn port association show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <port association ID> <bgpvpn>
```

Table 13.49. Positional Arguments

Value	Summary
<code><port association ID></code>	Port association id to look up
<code><bgpvpn></code>	Bgp vpn the association belongs to (name or id)

Table 13.50. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 13.51. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 13.52. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.53. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 13.54. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

13.13. BGPVPN PORT ASSOCIATION UNSET

Unset BGP VPN port association properties

Usage:

```

openstack bgpvpn port association unset [-h]
                                     [--advertise-fixed-ips | --no-advertise-fixed-ips]
                                     [--prefix-route <cidr>]
                                     [--bgpvpn-route <BGP VPN ID or name>]
                                     [--all-prefix-routes]
                                     [--all-bgpvpn-routes]
                                     <port association ID> <bgpvpn>

```

Table 13.55. Positional Arguments

Value	Summary
<port association ID>	Port association id to update
<bgpvpn>	Bgp vpn the port association belongs to (name or id)

Table 13.56. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--advertise-fixed-ips	Fixed ips of the port will not be advertised to the BGP VPN
--no-advertise-fixed-ips	Fixed ips of the port will be advertised to the bgp VPN
--prefix-route <cidr>	Remove prefix route in cidr notation (repeat option for multiple prefix routes)
--bgpvpn-route <BGP VPN ID or name>	Remove bgp vpn route (repeat option for multiple bgp VPN routes)
--all-prefix-routes	Empty prefix route list
--all-bgpvpn-routes	Empty bgp vpn route list

13.14. BGPVPN ROUTER ASSOCIATION CREATE

Create a BGP VPN router association

Usage:

```
openstack bgpvpn router association create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--project <project>]
                                         [--project-domain <project-domain>]
                                         [--advertise_extra_routes | --no-advertise_extra_routes]
                                         <bgpvpn> <router>
```

Table 13.57. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn to apply the router association (name or id)
<router>	Router to associate the bgp vpn (name or id)

Table 13.58. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--advertise_extra_routes	Routes will be advertised to the bgp vpn (default)
--no-advertise_extra_routes	Routes from the router will not be advertised to the BGP VPN

Table 13.59. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 13.60. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.61. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 13.62. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

13.15. BGPVPN ROUTER ASSOCIATION DELETE

Delete a BGP VPN router association(s) for a given BGP VPN

Usage:

```
openstack bgpvpn router association delete [-h]
                                     <router association ID>
                                     [<router association ID> ...]
                                     <bgpvpn>
```

Table 13.63. Positional Arguments

Value	Summary
<code><router association ID></code>	Router association id(s) to remove
<code><bgpvpn></code>	Bgp vpn the router association belongs to (name or id)

Table 13.64. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

13.16. BGPVPN ROUTER ASSOCIATION LIST

List BGP VPN router associations for a given BGP VPN

Usage:

```
openstack bgpvpn router association list [-h]
                                       [-f {csv,json,table,value,yaml}]
                                       [-c COLUMN]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--noindent]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--long]
[--property <key=value>]
<bgpvpn>

```

Table 13.65. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn listed associations belong to (name or id)

Table 13.66. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--property <key=value>	Filter property to apply on returned bgp vpns (repeat to filter on multiple properties)

Table 13.67. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 13.68. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 13.69. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.70. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

13.17. BGPVPN ROUTER ASSOCIATION SET

Set BGP VPN router association properties

Usage:

```
openstack bgpvpn router association set [-h]
    [--advertise_extra_routes | --no-advertise_extra_routes]
    <router association ID>
    <bgpvpn>
```

Table 13.71. Positional Arguments

Value	Summary
<router association ID>	Router association id to update
<bgpvpn>	Bgp vpn the router association belongs to (name or id)

Table 13.72. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--advertise_extra_routes	Routes will be advertised to the bgp vpn

Value	Summary
<code>--no-advertise_extra_routes</code>	Routes from the router will not be advertised to the BGP VPN

13.18. BGPVPN ROUTER ASSOCIATION SHOW

Show information of a given BGP VPN router association

Usage:

```

openstack bgpvpn router association show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         <router association ID>
                                         <bgpvpn>

```

Table 13.73. Positional Arguments

Value	Summary
<code><router association ID></code>	Router association id to look up
<code><bgpvpn></code>	Bgp vpn the association belongs to (name or id)

Table 13.74. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 13.75. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 13.76. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 13.77. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 13.78. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

13.19. BGPVPN ROUTER ASSOCIATION UNSET

Unset BGP VPN router association properties

Usage:

```
openstack bgpvpn router association unset [-h]
                                     [--advertise_extra_routes | --no-advertise_extra_routes]
                                     <router association ID>
                                     <bgpvpn>
```

Table 13.79. Positional Arguments

Value	Summary
<code><router association ID></code>	Router association id to update
<code><bgpvpn></code>	Bgp vpn the router association belongs to (name or id)

Table 13.80. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--advertise_extra_routes	Routes from the router will not be advertised to the BGP VPN
--no-advertise_extra_routes	Routes will be advertised to the bgp vpn

13.20. BGPVPN SET

Set BGP VPN properties

Usage:

```

openstack bgpvpn set [-h] [--name <name>]
                    [--route-target <route-target>]
                    [--no-route-target]
                    [--import-target <import-target>]
                    [--no-import-target]
                    [--export-target <export-target>]
                    [--no-export-target]
                    [--route-distinguisher <route-distinguisher>]
                    [--no-route-distinguisher] [--vni VNI]
                    [--local-pref LOCAL_PREF]
                    <bgpvpn>

```

Table 13.81. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn to update (name or id)

Table 13.82. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the bgp vpn
--route-target <route-target>	Add route target to import/export list (repeat option for multiple Route Targets)
--no-route-target	Empty route target list
--import-target <import-target>	Add route target to import list (repeat option for multiple Route Targets)

Value	Summary
--no-import-target	Empty import route target list
--export-target <export-target>	Add route target to export list (repeat option for multiple Route Targets)
--no-export-target	Empty export route target list
--route-distinguisher <route-distinguisher>	Add route distinguisher to the list of route Distinguishers from which a Route Distinguishers will be picked from to advertise a VPN route (repeat option for multiple Route Distinguishers)
--no-route-distinguisher	Empty route distinguisher list
--vni VNI	Vxlan network identifier to be used for this bgpvpn when a VXLAN encapsulation is used
--local-pref LOCAL_PREF	Default bgp local_pref to use in route advertisementstowards this BGPVPN.

13.21. BGPVPN SHOW

Show information of a given BGP VPN

Usage:

```
openstack bgpvpn show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <bgpvpn>
```

Table 13.83. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn to display (name or id)

Table 13.84. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 13.85. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 13.86. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 13.87. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 13.88. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

13.22. BGPVPN UNSET

Unset BGP VPN properties

Usage:

```
openstack bgpvpn unset [-h] [--route-target <route-target>]
                        [--all-route-target]
                        [--import-target <import-target>]
                        [--all-import-target]
                        [--export-target <export-target>]
                        [--all-export-target]
                        [--route-distinguisher <route-distinguisher>]
```



```

[--all-route-distinguisher] [--vni VNI]
[--local-pref LOCAL_PREF]
<bgpvpn>

```

Table 13.89. Positional Arguments

Value	Summary
<bgpvpn>	Bgp vpn to update (name or id)

Table 13.90. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--route-target <route-target>	Remove route target from import/export list (repeat option for multiple Route Targets)
--all-route-target	Empty route target list
--import-target <import-target>	Remove route target from import list (repeat option for multiple Route Targets)
--all-import-target	Empty import route target list
--export-target <export-target>	Remove route target from export list (repeat option for multiple Route Targets)
--all-export-target	Empty export route target list
--route-distinguisher <route-distinguisher>	Remove route distinguisher from the list of route Distinguishers from which a Route Distinguishers will be picked from to advertise a VPN route (repeat option for multiple Route Distinguishers)
--all-route-distinguisher	Empty route distinguisher list
--vni VNI	Vxlan network identifier to be used for this bgpvpn when a VXLAN encapsulation is used
--local-pref LOCAL_PREF	Default bgp local_pref to use in route advertisementstowards this BGPVPN.

CHAPTER 14. CA

This chapter describes the commands under the **ca** command.

14.1. CA GET

Retrieve a CA by providing its URI.

Usage:

```
openstack ca get [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                 [--noindent] [--prefix PREFIX] [--max-width <integer>]
                 [--fit-width] [--print-empty]
                 URI
```

Table 14.1. Positional Arguments

Value	Summary
URI	The uri reference for the ca.

Table 14.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 14.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 14.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 14.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 14.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

14.2. CA LIST

List CAs.

Usage:

```
openstack ca list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                  [--quote {all,minimal,none,nonnumeric}] [--noindent]
                  [--max-width <integer>] [--fit-width] [--print-empty]
                  [--sort-column SORT_COLUMN] [--limit LIMIT]
                  [--offset OFFSET] [--name NAME]
```

Table 14.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit LIMIT, -l LIMIT	Specify the limit to the number of items to list per page (default: 10; maximum: 100)
--offset OFFSET, -o OFFSET	Specify the page offset (default: 0)
--name NAME, -n NAME	Specify the ca name (default: none)

Table 14.8. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 14.9. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 14.10. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 14.11. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 15. CATALOG

This chapter describes the commands under the **catalog** command.

15.1. CATALOG LIST

List services in the service catalog

Usage:

```
openstack catalog list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
```

Table 15.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 15.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 15.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 15.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 15.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

15.2. CATALOG SHOW

Display service catalog details

Usage:

```
openstack catalog show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <service>
```

Table 15.6. Positional Arguments

Value	Summary
<code><service></code>	Service to display (type or name)

Table 15.7. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 15.8. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 15.9. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 15.10. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 15.11. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 16. COE

This chapter describes the commands under the **coe** command.

16.1. COE CA ROTATE

Rotate the CA certificate for cluster to revoke access.

Usage:

```
openstack coe ca rotate [-h] <cluster>
```

Table 16.1. Positional Arguments

Value	Summary
<cluster>	Id or name of the cluster

Table 16.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

16.2. COE CA SHOW

Show details about the CA certificate for a cluster.

Usage:

```
openstack coe ca show [-h] <cluster>
```

Table 16.3. Positional Arguments

Value	Summary
<cluster>	Id or name of the cluster

Table 16.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

16.3. COE CA SIGN

Generate the CA certificate for a cluster.

Usage:

```
openstack coe ca sign [-h] <cluster> <csr>
```

Table 16.5. Positional Arguments

Value	Summary
<cluster>	Id or name of the cluster
<csr>	File path of csr file to send to magnum to get signed.

Table 16.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

16.4. COE CLUSTER CONFIG

Get Configuration for a Cluster

Usage:

```
openstack coe cluster config [-h] [--dir <dir>] [--force]
                             [--output-certs] [--use-certificate]
                             [--use-keystone]
                             <cluster>
```

Table 16.7. Positional Arguments

Value	Summary
<cluster>	The name or uuid of cluster to update

Table 16.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--dir <dir>	Directory to save the certificate and config files.
--force	Overwrite files if existing.
--output-certs	Output certificates in separate files.

Value	Summary
--use-certificate	Use certificate in config files.
--use-keystone	Use keystone token in config files.

16.5. COE CLUSTER CREATE

Create a cluster

Usage:

```

openstack coe cluster create [-h] --cluster-template <cluster-template>
                               [--discovery-url <discovery-url>]
                               [--docker-volume-size <docker-volume-size>]
                               [--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...>]
                               [--keypair <keypair>]
                               [--master-count <master-count>]
                               [--node-count <node-count>]
                               [--timeout <timeout>]
                               [--master-flavor <master-flavor>]
                               [--flavor <flavor>]
                               <name>

```

Table 16.9. Positional Arguments

Value	Summary
<name>	Name of the cluster to create.

Table 16.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--cluster-template <cluster-template>	Id or name of the cluster template.
--discovery-url <discovery-url>	Specifies custom delivery url for node discovery.
--docker-volume-size <docker-volume-size>	The size in gb for the docker volume to use.
--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...>	Arbitrary labels in the form of key=valuepairs to associate with a cluster template. May be used multiple times.
--keypair <keypair>	Uuid or name of the keypair to use.

Value	Summary
<code>--master-count <master-count></code>	The number of master nodes for the cluster.
<code>--node-count <node-count></code>	The cluster node count.
<code>--timeout <timeout></code>	The timeout for cluster creation time, the default is 60 minutes.
<code>--master-flavor <master-flavor></code>	The nova flavor name or uuid to use when launching the master node of the Cluster.
<code>--flavor <flavor></code>	The nova flavor name or uuid to use when launching the Cluster.

16.6. COE CLUSTER DELETE

Delete a cluster

Usage:

```
openstack coe cluster delete [-h] <cluster> [<cluster> ...]
```

Table 16.11. Positional Arguments

Value	Summary
<code><cluster></code>	Id or name of the cluster(s) to delete.

Table 16.12. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

16.7. COE CLUSTER LIST

List clusters

Usage:

```
openstack coe cluster list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
```

```

[--sort-column SORT_COLUMN]
[--limit <limit>] [--sort-key <sort-key>]
[--sort-dir <sort-dir>]

```

Table 16.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of clusters to return
--sort-key <sort-key>	Column to sort results by
--sort-dir <sort-dir>	Direction to sort. "asc" or "desc".

Table 16.14. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 16.15. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 16.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 16.17. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

16.8. COE CLUSTER SHOW

Show a Cluster

Usage:

```
openstack coe cluster show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <cluster>
```

Table 16.18. Positional Arguments

Value	Summary
<code><cluster></code>	Id or name of the cluster to show.

Table 16.19. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 16.20. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 16.21. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 16.22. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 16.23. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

16.9. COE CLUSTER TEMPLATE CREATE

Create a Cluster Template.

Usage:

```

openstack coe cluster template create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    --coe <coe> --image <image>
    --external-network
    <external-network>
    [--keypair <keypair>]
    [--fixed-network <fixed-network>]
    [--fixed-subnet <fixed-subnet>]
    [--network-driver <network-driver>]
    [--volume-driver <volume-driver>]
    [--dns-nameserver <dns-nameserver>]
    [--flavor <flavor>]
    [--master-flavor <master-flavor>]

```

```

[--docker-volume-size <docker-volume-size>]
[--docker-storage-driver <docker-storage-driver>]
[--http-proxy <http-proxy>]
[--https-proxy <https-proxy>]
[--no-proxy <no-proxy>]
[--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...>]
[--tls-disabled] [--public]
[--registry-enabled]
[--server-type <server-type>]
[--master-lb-enabled]
[--floating-ip-enabled]
[--floating-ip-disabled]
<name>

```

Table 16.24. Positional Arguments

Value	Summary
<name>	Name of the cluster template to create.

Table 16.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--coe <coe>	Specify the container orchestration engine to use.
--image <image>	The name or uuid of the base image to customize for the Cluster.
--external-network <external-network>	The external neutron network name or uuid to connect to this Cluster Template.
--keypair <keypair>	The name or uuid of the ssh keypair to load into the Cluster nodes.
--fixed-network <fixed-network>	The private neutron network name to connect to this Cluster model.
--fixed-subnet <fixed-subnet>	The private neutron subnet name to connect to cluster.
--network-driver <network-driver>	The network driver name for instantiating container networks.
--volume-driver <volume-driver>	The volume driver name for instantiating container volume.
--dns-nameserver <dns-nameserver>	The dns nameserver to use for this cluster template.

Value	Summary
<code>--flavor <flavor></code>	The nova flavor name or uuid to use when launching the Cluster.
<code>--master-flavor <master-flavor></code>	The nova flavor name or uuid to use when launching the master node of the Cluster.
<code>--docker-volume-size <docker-volume-size></code>	Specify the number of size in gb for the docker volume to use.
<code>--docker-storage-driver <docker-storage-driver></code>	Select a docker storage driver. supported: devicemapper, overlay. Default: devicemapper
<code>--http-proxy <http-proxy></code>	The http_proxy address to use for nodes in cluster.
<code>--https-proxy <https-proxy></code>	The https_proxy address to use for nodes in cluster.
<code>--no-proxy <no-proxy></code>	The no_proxy address to use for nodes in cluster.
<code>--labels <KEY1=VALUE1,KEY2=VALUE2;KEY3=VALUE3...></code>	Arbitrary labels in the form of key=value pairs to associate with a cluster template. May be used multiple times.
<code>--tls-disabled</code>	Disable tls in the cluster.
<code>--public</code>	Make cluster template public.
<code>--registry-enabled</code>	Enable docker registry in the cluster
<code>--server-type <server-type></code>	Specify the server type to be used for example vm. for this release default server type will be vm.
<code>--master-lb-enabled</code>	Indicates whether created clusters should have a load balancer for master nodes or not.
<code>--floating-ip-enabled</code>	Indicates whether created clusters should have a floating ip.
<code>--floating-ip-disabled</code>	Disables floating ip creation on the new cluster

Table 16.26. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 16.27. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 16.28. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 16.29. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

16.10. COE CLUSTER TEMPLATE DELETE

Delete a Cluster Template.

Usage:

```
openstack coe cluster template delete [-h]
                                     <cluster-templates>
                                     [<cluster-templates> ...]
```

Table 16.30. Positional Arguments

Value	Summary
<cluster-templates>	Id or name of the (cluster template)s to delete.

Table 16.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

16.11. COE CLUSTER TEMPLATE LIST

List Cluster Templates.

Usage:

```

openstack coe cluster template list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--limit <limit>]
                                     [--sort-key <sort-key>]
                                     [--sort-dir <sort-dir>]
                                     [--fields <fields>]

```

Table 16.32. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Maximum number of cluster templates to return
--sort-key <sort-key>	Column to sort results by
--sort-dir <sort-dir>	Direction to sort. "asc" or "desc".
--fields <fields>	Comma-separated list of fields to display. available fields: uuid, name, coe, image_id, public, link, apiserver_port, server_type, tls_disabled, registry_enabled

Table 16.33. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 16.34. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 16.35. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 16.36. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

16.12. COE CLUSTER TEMPLATE SHOW

Show a Cluster Template.

Usage:

```
openstack coe cluster template show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <cluster-template>
```

Table 16.37. Positional Arguments

Value	Summary
<cluster-template>	Id or name of the cluster template to show.

Table 16.38. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 16.39. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 16.40. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 16.41. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 16.42. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

16.13. COE CLUSTER TEMPLATE UPDATE

Update a Cluster Template.

Usage:

```
openstack coe cluster template update [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <cluster-template> <op>
                                     <path=value> [<path=value> ...]
```

Table 16.43. Positional Arguments

Value	Summary
<code><cluster-template></code>	The name or uuid of cluster template to update
<code><op></code>	Operations: one of <i>add</i> , <i>replace</i> or <i>remove</i>
<code><path=value></code>	Attributes to add/replace or remove (only path is necessary on remove)

Table 16.44. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 16.45. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 16.46. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 16.47. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 16.48. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

16.14. COE CLUSTER UPDATE

Update a Cluster

Usage:

```
openstack coe cluster update [-h] [--rollback]
                             <cluster> <op> <path=value>
                             [<path=value> ...]
```

Table 16.49. Positional Arguments

Value	Summary
<code><cluster></code>	The name or uuid of cluster to update
<code><op></code>	Operations: one of <i>add</i> , <i>replace</i> or <i>remove</i>
<code><path=value></code>	Attributes to add/replace or remove (only path is necessary on remove)

Table 16.50. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--rollback	Rollback cluster on update failure.

16.15. COE QUOTAS CREATE

Create a quota.

Usage:

```
openstack coe quotas create [-h] --project-id <project-id> --resource
                             <resource> [--hard-limit <hard-limit>]
```

Table 16.51. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-id <project-id>	Project id
--resource <resource>	Resource name.
--hard-limit <hard-limit>	Max resource limit (default: hard-limit=1)

16.16. COE QUOTAS DELETE

Delete specified resource quota.

Usage:

```
openstack coe quotas delete [-h] --project-id <project-id> --resource
                             <resource>
```

Table 16.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-id <project-id>	Project id
--resource <resource>	Resource name.

16.17. COE QUOTAS LIST

Print a list of available quotas.

Usage:

```
openstack coe quotas list [-h] [--marker <marker>] [--limit <limit>]
                          [--sort-key <sort-key>]
                          [--sort-dir <sort-dir>] [--all-tenants]
```

Table 16.53. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker <marker>	The last quota uuid of the previous page; displays list of quotas after "marker".
--limit <limit>	Maximum number of quotas to return.
--sort-key <sort-key>	Column to sort results by.
--sort-dir <sort-dir>	Direction to sort. "asc" or "desc".
--all-tenants	Flag to indicate list all tenant quotas.

16.18. COE QUOTAS SHOW

Show details about the given project resource quota.

Usage:

```
openstack coe quotas show [-h] --project-id <project-id> --resource
                          <resource>
```

Table 16.54. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-id <project-id>	Project id
--resource <resource>	Resource name.

16.19. COE QUOTAS UPDATE

Update information about the given project resource quota.

Usage:


```
openstack coe quotas update [-h] --project-id <project-id> --resource
                             <resource> [--hard-limit <hard-limit>]
```

Table 16.55. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-id <project-id>	Project id
--resource <resource>	Resource name.
--hard-limit <hard-limit>	Max resource limit (default: hard-limit=1)

16.20. COE SERVICE LIST

Print a list of Magnum services.

Usage:

```
openstack coe service list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
```

Table 16.56. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 16.57. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 16.58. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 16.59. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 16.60. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

16.21. COE STATS LIST

Show stats for the given `project_id`

Usage:

```
openstack coe stats list [-h] <project>
```

Table 16.61. Positional Arguments

Value	Summary
<code><project></code>	Project id

Table 16.62. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

CHAPTER 17. COMMAND

This chapter describes the commands under the **command** command.

17.1. COMMAND LIST

List recognized commands by group

Usage:

```
openstack command list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--group <group-keyword>]
```

Table 17.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--group <group-keyword>	Show commands filtered by a command group, for example: identity, volume, compute, image, network and other keywords

Table 17.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 17.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 17.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 17.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 18. COMPLETE.ADOC

This chapter describes the commands under the **complete.adoc** command.

18.1. COMPLETE

print bash completion command

Usage:

```
openstack complete [-h] [--name <command_name>] [--shell <shell>]
```

Table 18.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <command_name>	Command name to support with command completion
--shell <shell>	Shell being used. use none for data only (default: bash)

CHAPTER 19. COMPUTE

This chapter describes the commands under the **compute** command.

19.1. COMPUTE AGENT CREATE

Create compute agent

Usage:

```
openstack compute agent create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <os> <architecture> <version> <url>
                               <md5hash> <hypervisor>
```

Table 19.1. Positional Arguments

Value	Summary
<os>	Type of os
<architecture>	Type of architecture
<version>	Version
<url>	Url
<md5hash>	Md5 hash
<hypervisor>	Type of hypervisor

Table 19.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 19.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 19.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 19.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 19.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

19.2. COMPUTE AGENT DELETE

Delete compute agent(s)

Usage:

```
openstack compute agent delete [-h] <id> [<id> ...]
```

Table 19.7. Positional Arguments

Value	Summary
<id>	Id of agent(s) to delete

Table 19.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

19.3. COMPUTE AGENT LIST

List compute agents

Usage:

```
openstack compute agent list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--hypervisor <hypervisor>]
```

Table 19.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--hypervisor <hypervisor>	Type of hypervisor

Table 19.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 19.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 19.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 19.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

19.4. COMPUTE AGENT SET

Set compute agent properties

Usage:

```
openstack compute agent set [-h] [--agent-version <version>]
                             [--url <url>] [--md5hash <md5hash>]
                             <id>
```

Table 19.14. Positional Arguments

Value	Summary
<id>	Id of the agent

Table 19.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--agent-version <version>	Version of the agent
--url <url>	Url of the agent
--md5hash <md5hash>	Md5 hash of the agent

19.5. COMPUTE SERVICE DELETE

Delete compute service(s)

Usage:

```
openstack compute service delete [-h] <service> [<service> ...]
```

Table 19.16. Positional Arguments

Value	Summary
<service>	Compute service(s) to delete (id only). if using ``--os-compute-api-version`` 2.53 or greater, the ID is a UUID which can be retrieved by listing compute services using the same 2.53+ microversion.

Table 19.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

19.6. COMPUTE SERVICE LIST

List compute services. Using ``--os-compute-api-version`` 2.53 or greater will return the ID as a UUID value which can be used to uniquely identify the service in a multi-cell deployment.

Usage:

```
openstack compute service list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--host <host>] [--service <service>]
                               [--long]
```

Table 19.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--host <host>	List services on specified host (name only)
--service <service>	List only specified service (name only)

Value	Summary
<code>--long</code>	List additional fields in output

Table 19.19. Output Formatters

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 19.20. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 19.21. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 19.22. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

19.7. COMPUTE SERVICE SET

Set compute service properties

Usage:

```
openstack compute service set [-h] [--enable | --disable]
                               [--disable-reason <reason>]
                               [--up | --down]
                               <host> <service>
```

Table 19.23. Positional Arguments

Value	Summary
<host>	Name of host
<service>	Name of service (binary name)

Table 19.24. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--enable	Enable service
--disable	Disable service
--disable-reason <reason>	Reason for disabling the service (in quotes). should be used with --disable option.
--up	Force up service
--down	Force down service

CHAPTER 20. CONFIGURATION

This chapter describes the commands under the **configuration** command.

20.1. CONFIGURATION SHOW

Display configuration details

Usage:

```
openstack configuration show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--mask | --unmask]
```

Table 20.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--mask	Attempt to mask passwords (default)
--unmask	Show password in clear text

Table 20.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 20.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 20.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 20.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 21. CONSISTENCY

This chapter describes the commands under the **consistency** command.

21.1. CONSISTENCY GROUP ADD VOLUME

Add volume(s) to consistency group

Usage:

```
openstack consistency group add volume [-h]
                                     <consistency-group> <volume>
                                     [<volume> ...]
```

Table 21.1. Positional Arguments

Value	Summary
<consistency-group>	Consistency group to contain <volume> (name or id)
<volume>	Volume(s) to add to <consistency-group> (name or id) (repeat option to add multiple volumes)

Table 21.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

21.2. CONSISTENCY GROUP CREATE

Create new consistency group.

Usage:

```
openstack consistency group create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   (--volume-type <volume-type> | --consistency-group-source <consistency-
group> | --consistency-group-snapshot <consistency-group-snapshot>)
                                   [--description <description>]
                                   [--availability-zone <availability-zone>]
                                   [<name>]
```

Table 21.3. Positional Arguments

Value	Summary
<name>	Name of new consistency group (default to none)

Table 21.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--volume-type <volume-type>	Volume type of this consistency group (name or id)
--consistency-group-source <consistency-group>	Existing consistency group (name or id)
--consistency-group-snapshot <consistency-group-snapshot>	Existing consistency group snapshot (name or id)
--description <description>	Description of this consistency group
--availability-zone <availability-zone>	Availability zone for this consistency group (not available if creating consistency group from source)

Table 21.5. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 21.6. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 21.7. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 21.8. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

21.3. CONSISTENCY GROUP DELETE

Delete consistency group(s).

Usage:

```
openstack consistency group delete [-h] [--force]
    <consistency-group>
    [<consistency-group> ...]
```

Table 21.9. Positional Arguments

Value	Summary
<code><consistency-group></code>	Consistency group(s) to delete (name or id)

Table 21.10. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--force</code>	Allow delete in state other than error or available

21.4. CONSISTENCY GROUP LIST

List consistency groups.

Usage:

```
openstack consistency group list [-h] [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--all-projects] [--long]
```

■

Table 21.11. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show details for all projects. admin only. (defaults to False)
--long	List additional fields in output

Table 21.12. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 21.13. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 21.14. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 21.15. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

21.5. CONSISTENCY GROUP REMOVE VOLUME

Remove volume(s) from consistency group

Usage:

```
openstack consistency group remove volume [-h]
                                     <consistency-group> <volume>
                                     [<volume> ...]
```

Table 21.16. Positional Arguments

Value	Summary
<consistency-group>	Consistency group containing <volume> (name or id)
<volume>	Volume(s) to remove from <consistency-group> (name or ID) (repeat option to remove multiple volumes)

Table 21.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

21.6. CONSISTENCY GROUP SET

Set consistency group properties

Usage:

```
openstack consistency group set [-h] [--name <name>]
                                [--description <description>]
                                <consistency-group>
```

Table 21.18. Positional Arguments

Value	Summary
<consistency-group>	Consistency group to modify (name or id)

Table 21.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New consistency group name
--description <description>	New consistency group description

21.7. CONSISTENCY GROUP SHOW

Display consistency group details.

Usage:

```
openstack consistency group show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <consistency-group>
```

Table 21.20. Positional Arguments

Value	Summary
<consistency-group>	Consistency group to display (name or id)

Table 21.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 21.22. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 21.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 21.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 21.25. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

21.8. CONSISTENCY GROUP SNAPSHOT CREATE

Create new consistency group snapshot.

Usage:

```
openstack consistency group snapshot create [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN] [--noindent]
                                           [--prefix PREFIX]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty]
                                           [--consistency-group <consistency-group>]
                                           [--description <description>]
                                           [<snapshot-name>]
```

Table 21.26. Positional Arguments

Value	Summary
<snapshot-name>	Name of new consistency group snapshot (default to None)

Table 21.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--consistency-group <consistency-group>	Consistency group to snapshot (name or id) (default to be the same as <snapshot-name>)
--description <description>	Description of this consistency group snapshot

Table 21.28. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 21.29. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 21.30. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 21.31. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

21.9. CONSISTENCY GROUP SNAPSHOT DELETE

Delete consistency group snapshot(s).

Usage:

```
openstack consistency group snapshot delete [-h]
                                         <consistency-group-snapshot>
                                         [<consistency-group-snapshot> ...]
```

Table 21.32. Positional Arguments

Value	Summary
<code><consistency-group-snapshot></code>	Consistency group snapshot(s) to delete (name or id)

Table 21.33. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

21.10. CONSISTENCY GROUP SNAPSHOT LIST

List consistency group snapshots.

Usage:

```
openstack consistency group snapshot list [-h]
                                           [-f {csv,json,table,value,yaml}]
                                           [-c COLUMN]
                                           [--quote {all,minimal,none,nonnumeric}]
                                           [--noindent]
```

```

[--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--all-projects] [--long]
[--status <status>]
[--consistency-group <consistency-group>]

```

Table 21.34. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show detail for all projects (admin only) (defaults to False)
--long	List additional fields in output
--status <status>	Filters results by a status ("available", "error", "creating", "deleting" or "error_deleting")
--consistency-group <consistency-group>	Filters results by a consistency group (name or id)

Table 21.35. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 21.36. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 21.37. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 21.38. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

21.11. CONSISTENCY GROUP SNAPSHOT SHOW

Display consistency group snapshot details

Usage:

```
openstack consistency group snapshot show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         <consistency-group-snapshot>
```

Table 21.39. Positional Arguments

Value	Summary
<code><consistency-group-snapshot></code>	Consistency group snapshot to display (name or id)

Table 21.40. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 21.41. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 21.42. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 21.43. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 21.44. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 22. CONSOLE

This chapter describes the commands under the **console** command.

22.1. CONSOLE LOG SHOW

Show server's console output

Usage:

```
openstack console log show [-h] [--lines <num-lines>] <server>
```

Table 22.1. Positional Arguments

Value	Summary
<server>	Server to show console log (name or id)

Table 22.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--lines <num-lines>	Number of lines to display from the end of the log (default=all)

22.2. CONSOLE URL SHOW

Show server's remote console URL

Usage:

```
openstack console url show [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent] [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty]
    [--novnc | --xvpvnc | --spice | --rdp | --serial | --mks]
    <server>
```

Table 22.3. Positional Arguments

Value	Summary
<server>	Server to show url (name or id)

Table 22.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--novnc	Show novnc console url (default)
--xvpng	Show xvpng console url
--spice	Show spice console url
--rdp	Show rdp console url
--serial	Show serial console url
--mks	Show webmks console url

Table 22.5. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 22.6. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 22.7. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 22.8. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 23. CONSUMER

This chapter describes the commands under the **consumer** command.

23.1. CONSUMER CREATE

Create new consumer

Usage:

```
openstack consumer create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--description <description>]
```

Table 23.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	New consumer description

Table 23.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 23.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 23.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 23.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

23.2. CONSUMER DELETE

Delete consumer(s)

Usage:

```
openstack consumer delete [-h] <consumer> [<consumer> ...]
```

Table 23.6. Positional Arguments

Value	Summary
<code><consumer></code>	Consumer(s) to delete

Table 23.7. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

23.3. CONSUMER LIST

List consumers

Usage:

```
openstack consumer list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
```

Table 23.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 23.9. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 23.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 23.11. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 23.12. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

23.4. CONSUMER SET

Set consumer properties

Usage:

```
openstack consumer set [-h] [--description <description>] <consumer>
```

Table 23.13. Positional Arguments

Value	Summary
<consumer>	Consumer to modify

Table 23.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	New consumer description

23.5. CONSUMER SHOW

Display consumer details

Usage:

```
openstack consumer show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <consumer>
```

Table 23.15. Positional Arguments

Value	Summary
<consumer>	Consumer to display

Table 23.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 23.17. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 23.18. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 23.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 23.20. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 24. CONTAINER

This chapter describes the commands under the **container** command.

24.1. CONTAINER CREATE

Create new container

Usage:

```
openstack container create [-h] [-f {csv,json,table,value,yaml}]
                           [-c COLUMN]
                           [--quote {all,minimal,none,nonnumeric}]
                           [--noindent] [--max-width <integer>]
                           [--fit-width] [--print-empty]
                           [--sort-column SORT_COLUMN]
                           <container-name> [<container-name> ...]
```

Table 24.1. Positional Arguments

Value	Summary
<container-name>	New container name(s)

Table 24.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 24.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 24.4. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 24.5. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 24.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

24.2. CONTAINER DELETE

Delete container

Usage:

```
openstack container delete [-h] [--recursive]
    <container> [<container> ...]
```

Table 24.7. Positional Arguments

Value	Summary
<code><container></code>	Container(s) to delete

Table 24.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--recursive, -r</code>	Recursively delete objects and container

24.3. CONTAINER LIST

List containers

Usage:

```
openstack container list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--prefix <prefix>] [--marker <marker>]
                        [--end-marker <end-marker>]
                        [--limit <num-containers>] [--long] [--all]
```

Table 24.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--prefix <prefix>	Filter list using <prefix>
--marker <marker>	Anchor for paging
--end-marker <end-marker>	End anchor for paging
--limit <num-containers>	Limit the number of containers returned
--long	List additional fields in output
--all	List all containers (default is 10000)

Table 24.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 24.11. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 24.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 24.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

24.4. CONTAINER SAVE

Save container contents locally

Usage:

```
openstack container save [-h] <container>
```

Table 24.14. Positional Arguments

Value	Summary
<code><container></code>	Container to save

Table 24.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

24.5. CONTAINER SET

Set container properties

Usage:

```
openstack container set [-h] --property <key=value> <container>
```

Table 24.16. Positional Arguments

Value	Summary
<container>	Container to modify

Table 24.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Set a property on this container (repeat option to set multiple properties)

24.6. CONTAINER SHOW

Display container details

Usage:

```
openstack container show [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent] [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty]
    <container>
```

Table 24.18. Positional Arguments

Value	Summary
<container>	Container to display

Table 24.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 24.20. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 24.21. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 24.22. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 24.23. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

24.7. CONTAINER UNSET

Unset container properties

Usage:

```
openstack container unset [-h] --property <key> <container>
```

Table 24.24. Positional Arguments

Value	Summary
<container>	Container to modify

Table 24.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from container (repeat option to remove multiple properties)

CHAPTER 25. CREDENTIAL

This chapter describes the commands under the **credential** command.

25.1. CREDENTIAL CREATE

Create new credential

Usage:

```
openstack credential create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--type <type>]
                             [--project <project>]
                             <user> <data>
```

Table 25.1. Positional Arguments

Value	Summary
<user>	User that owns the credential (name or id)
<data>	New credential data

Table 25.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type <type>	New credential type: cert, ec2, totp and so on
--project <project>	Project which limits the scope of the credential (name or ID)

Table 25.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 25.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 25.5. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 25.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

25.2. CREDENTIAL DELETE

Delete credential(s)

Usage:

```
openstack credential delete [-h] <credential-id> [<credential-id> ...]
```

Table 25.7. Positional Arguments

Value	Summary
<code><credential-id></code>	Id of credential(s) to delete

Table 25.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

25.3. CREDENTIAL LIST

List credentials

Usage:

```
openstack credential list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--user <user>]
                        [--user-domain <user-domain>] [--type <type>]
```

Table 25.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	Filter credentials by <user> (name or id)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--type <type>	Filter credentials by type: cert, ec2, totp and so on

Table 25.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 25.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 25.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 25.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

25.4. CREDENTIAL SET

Set credential properties

Usage:

```
openstack credential set [-h] --user <user> --type <type> --data <data>
                        [--project <project>]
                        <credential-id>
```

Table 25.14. Positional Arguments

Value	Summary
<credential-id>	Id of credential to change

Table 25.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	User that owns the credential (name or id)
--type <type>	New credential type: cert, ec2, totp and so on
--data <data>	New credential data

Value	Summary
<code>--project <project></code>	Project which limits the scope of the credential (name or ID)

25.5. CREDENTIAL SHOW

Display credential details

Usage:

```
openstack credential show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <credential-id>
```

Table 25.16. Positional Arguments

Value	Summary
<code><credential-id></code>	Id of credential to display

Table 25.17. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 25.18. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 25.19. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 25.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 25.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 26. CRON

This chapter describes the commands under the **cron** command.

26.1. CRON TRIGGER CREATE

Create new trigger.

Usage:

```
openstack cron trigger create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--params PARAMS] [--pattern <* * * * *>]
                             [--first-time <YYYY-MM-DD HH:MM>]
                             [--count <integer>] [--utc]
                             name workflow_identifier [workflow_input]
```

Table 26.1. Positional Arguments

Value	Summary
name	Cron trigger name
workflow_identifier	Workflow name or id
workflow_input	Workflow input

Table 26.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--params PARAMS	Workflow params
--pattern <* * * * *>	Cron trigger pattern
--first-time <YYYY-MM-DD HH:MM>	Date and time of the first execution. time is treated as local time unless --utc is also specified
--count <integer>	Number of wanted executions
--utc	All times specified should be treated as utc

Table 26.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 26.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 26.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 26.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

26.2. CRON TRIGGER DELETE

Delete trigger.

Usage:

```
openstack cron trigger delete [-h] cron_trigger [cron_trigger ...]
```

Table 26.7. Positional Arguments

Value	Summary
cron_trigger	Name of cron trigger(s).

Table 26.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

26.3. CRON TRIGGER LIST

List all cron triggers.

Usage:

```

openstack cron trigger list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--marker [MARKER]] [--limit [LIMIT]]
                             [--sort_keys [SORT_KEYS]]
                             [--sort_dirs [SORT_DIRS]]
                             [--filter FILTERS]

```

Table 26.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Table 26.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 26.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 26.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 26.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

26.4. CRON TRIGGER SHOW

Show specific cron trigger.

Usage:

```
openstack cron trigger show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty]
cron_trigger

```

Table 26.14. Positional Arguments

Value	Summary
cron_trigger	Cron trigger name

Table 26.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 26.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 26.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 26.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 26.19. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 27. DATASTORE

This chapter describes the commands under the **datastore** command.

27.1. DATASTORE LIST

List available datastores

Usage:

```
openstack datastore list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
```

Table 27.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 27.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 27.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 27.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 27.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

27.2. DATASTORE SHOW

Shows details of a datastore

Usage:

```
openstack datastore show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <datastore>
```

Table 27.6. Positional Arguments

Value	Summary
<code><datastore></code>	Id of the datastore

Table 27.7. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 27.8. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 27.9. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 27.10. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 27.11. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

27.3. DATASTORE VERSION LIST

Lists available versions for a datastore

Usage:

```
openstack datastore version list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                <datastore>
```

Table 27.12. Positional Arguments

Value	Summary
<code><datastore></code>	Id or name of the datastore

Table 27.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 27.14. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 27.15. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 27.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 27.17. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

27.4. DATASTORE VERSION SHOW

Shows details of a datastore version.

Usage:

```
openstack datastore version show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--datastore <datastore>]
                                <datastore_version>
```

Table 27.18. Positional Arguments

Value	Summary
<datastore_version>	Id or name of the datastore version.

Table 27.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--datastore <datastore>	Id or name of the datastore. optional if the id of the datastore_version is provided.

Table 27.20. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 27.21. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 27.22. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 27.23. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 28. DNS

This chapter describes the commands under the **dns** command.

28.1. DNS QUOTA LIST

List quotas

Usage:

```
openstack dns quota list [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        [--project-id PROJECT_ID]
```

Table 28.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--project-id PROJECT_ID	Project id default: current project

Table 28.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 28.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 28.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 28.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

28.2. DNS QUOTA RESET

Reset quotas

Usage:

```
openstack dns quota reset [-h] [--all-projects] [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          [--project-id PROJECT_ID]
```

Table 28.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--project-id PROJECT_ID	Project id

28.3. DNS QUOTA SET

Set quotas

Usage:

```

openstack dns quota set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        [--project-id PROJECT_ID]
                        [--api-export-size <api-export-size>]
                        [--recordset-records <recordset-records>]
                        [--zone-records <zone-records>]
                        [--zone-recordsets <zone-recordsets>]
                        [--zones <zones>]

```

Table 28.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None
--project-id PROJECT_ID	Project id
--api-export-size <api-export-size>	New value for the api-export-size quota
--recordset-records <recordset-records>	New value for the recordset-records quota
--zone-records <zone-records>	New value for the zone-records quota
--zone-recordsets <zone-recordsets>	New value for the zone-recordsets quota
--zones <zones>	New value for the zones quota

Table 28.8. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 28.9. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 28.10. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 28.11. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

28.4. DNS SERVICE LIST

List service statuses

Usage:

```
openstack dns service list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--hostname HOSTNAME]
                          [--service_name SERVICE_NAME]
                          [--status STATUS] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
```

Table 28.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--hostname HOSTNAME	Hostname
--service_name SERVICE_NAME	Service name
--status STATUS	Status
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 28.13. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 28.14. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 28.15. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 28.16. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

28.5. DNS SERVICE SHOW

Show service status details

Usage:

```
openstack dns service show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--all-projects]
                             [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             id
```

Table 28.17. Positional Arguments

Value	Summary
<code>id</code>	Service status id

Table 28.18. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 28.19. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 28.20. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 28.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 28.22. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 29. DOMAIN

This chapter describes the commands under the **domain** command.

29.1. DOMAIN CREATE

Create new domain

Usage:

```
openstack domain create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--description <description>]
                        [--enable | --disable] [--or-show]
                        <domain-name>
```

Table 29.1. Positional Arguments

Value	Summary
<domain-name>	New domain name

Table 29.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	New domain description
--enable	Enable domain (default)
--disable	Disable domain
--or-show	Return existing domain

Table 29.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 29.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 29.5. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 29.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

29.2. DOMAIN DELETE

Delete domain(s)

Usage:

```
openstack domain delete [-h] <domain> [<domain> ...]
```

Table 29.7. Positional Arguments

Value	Summary
<code><domain></code>	Domain(s) to delete (name or id)

Table 29.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

29.3. DOMAIN LIST

List domains

Usage:

```
openstack domain list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                      [--quote {all,minimal,none,nonnumeric}]
                      [--noindent] [--max-width <integer>]
                      [--fit-width] [--print-empty]
                      [--sort-column SORT_COLUMN]
```

Table 29.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 29.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 29.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 29.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 29.13. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

29.4. DOMAIN SET

Set domain properties

Usage:

```
openstack domain set [-h] [--name <name>] [--description <description>]
                    [--enable | --disable]
                    <domain>
```

Table 29.14. Positional Arguments

Value	Summary
<code><domain></code>	Domain to modify (name or id)

Table 29.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	New domain name
<code>--description <description></code>	New domain description
<code>--enable</code>	Enable domain
<code>--disable</code>	Disable domain

29.5. DOMAIN SHOW

Display domain details

Usage:

```

openstack domain show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <domain>

```

Table 29.16. Positional Arguments

Value	Summary
<domain>	Domain to display (name or id)

Table 29.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 29.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 29.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 29.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 29.21. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 30. EC2

This chapter describes the commands under the **ec2** command.

30.1. EC2 CREDENTIALS CREATE

Create EC2 credentials

Usage:

```
openstack ec2 credentials create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--project <project>]
                                [--user <user>]
                                [--user-domain <user-domain>]
                                [--project-domain <project-domain>]
```

Table 30.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Create credentials in project (name or id; default: current authenticated project)
--user <user>	Create credentials for user (name or id; default: current authenticated user)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 30.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 30.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 30.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 30.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

30.2. EC2 CREDENTIALS DELETE

Delete EC2 credentials

Usage:

```
openstack ec2 credentials delete [-h] [--user <user>]
                                [--user-domain <user-domain>]
                                <access-key> [<access-key> ...]
```

Table 30.6. Positional Arguments

Value	Summary
<access-key>	Credentials access key(s)

Table 30.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--user <user></code>	Delete credentials for user (name or id)
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

30.3. EC2 CREDENTIALS LIST

List EC2 credentials

Usage:

```
openstack ec2 credentials list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--user <user>]
                               [--user-domain <user-domain>]
```

Table 30.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--user <user></code>	Filter list by user (name or id)
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Table 30.9. Output Formatters

Value	Summary
output formatter options- <code>f</code> {csv,json,table,value,yaml}, <code>--format</code> {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 30.10. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 30.11. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 30.12. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

30.4. EC2 CREDENTIALS SHOW

Display EC2 credentials details

Usage:

```
openstack ec2 credentials show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--user <user>]
                               [--user-domain <user-domain>]
                               <access-key>
```

Table 30.13. Positional Arguments

Value	Summary
<code><access-key></code>	Credentials access key

Table 30.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--user <user>	Show credentials for user (name or id)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Table 30.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 30.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 30.17. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 30.18. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 31. ENDPOINT

This chapter describes the commands under the **endpoint** command.

31.1. ENDPOINT ADD PROJECT

Associate a project to an endpoint

Usage:

```
openstack endpoint add project [-h] [--project-domain <project-domain>]
                               <endpoint> <project>
```

Table 31.1. Positional Arguments

Value	Summary
<endpoint>	Endpoint to associate with specified project (name or ID)
<project>	Project to associate with specified endpoint name or ID)

Table 31.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

31.2. ENDPOINT CREATE

Create new endpoint

Usage:

```
openstack endpoint create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--region <region-id>]
                          [--enable | --disable]
                          <service> <interface> <url>
```

Table 31.3. Positional Arguments

Value	Summary
<service>	Service to be associated with new endpoint (name or ID)
<interface>	New endpoint interface type (admin, public or internal)
<url>	New endpoint url

Table 31.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--region <region-id>	New endpoint region id
--enable	Enable endpoint (default)
--disable	Disable endpoint

Table 31.5. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 31.6. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.7. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 31.8. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

31.3. ENDPOINT DELETE

Delete endpoint(s)

Usage:

```
openstack endpoint delete [-h] <endpoint-id> [<endpoint-id> ...]
```

Table 31.9. Positional Arguments

Value	Summary
<code><endpoint-id></code>	Endpoint(s) to delete (id only)

Table 31.10. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

31.4. ENDPOINT GROUP ADD PROJECT

Add a project to an endpoint group

Usage:

```
openstack endpoint group add project [-h]
                                     [--project-domain <project-domain>]
                                     <endpoint-group> <project>
```

Table 31.11. Positional Arguments

Value	Summary
<code><endpoint-group></code>	Endpoint group (name or id)

Value	Summary
<project>	Project to associate (name or id)

Table 31.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

31.5. ENDPOINT GROUP CREATE

Create new endpoint group

Usage:

```
openstack endpoint group create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--description DESCRIPTION]
                                <name> <filename>
```

Table 31.13. Positional Arguments

Value	Summary
<name>	Name of the endpoint group
<filename>	Filename that contains a new set of filters

Table 31.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description DESCRIPTION	Description of the endpoint group

Table 31.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 31.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.17. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 31.18. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

31.6. ENDPOINT GROUP DELETE

Delete endpoint group(s)

Usage:

```
openstack endpoint group delete [-h]
                                <endpoint-group> [<endpoint-group> ...]
```

Table 31.19. Positional Arguments

Value	Summary
<endpoint-group>	Endpoint group(s) to delete (name or id)

Table 31.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

31.7. ENDPOINT GROUP LIST

List endpoint groups

Usage:

```
openstack endpoint group list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--endpointgroup <endpoint-group> | --project <project>]
                             [--domain <domain>]
```

Table 31.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--endpointgroup <endpoint-group>	Endpoint group (name or id)
--project <project>	Project (name or id)
--domain <domain>	Domain owning <project> (name or id)

Table 31.22. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 31.23. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 31.24. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 31.25. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

31.8. ENDPOINT GROUP REMOVE PROJECT

Remove project from endpoint group

Usage:

```
openstack endpoint group remove project [-h]
                                     [--project-domain <project-domain>]
                                     <endpoint-group> <project>
```

Table 31.26. Positional Arguments

Value	Summary
<endpoint-group>	Endpoint group (name or id)
<project>	Project to remove (name or id)

Table 31.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

31.9. ENDPOINT GROUP SET

Set endpoint group properties

Usage:

```
openstack endpoint group set [-h] [--name <name>]
                             [--filters <filename>]
                             [--description <description>]
                             <endpoint-group>
```

Table 31.28. Positional Arguments

Value	Summary
<endpoint-group>	Endpoint group to modify (name or id)

Table 31.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New endpoint group name
--filters <filename>	Filename that contains a new set of filters
--description <description>	New endpoint group description

31.10. ENDPOINT GROUP SHOW

Display endpoint group details

Usage:

```
openstack endpoint group show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             <endpointgroup>
```

Table 31.30. Positional Arguments

Value	Summary
<endpointgroup>	Endpoint group (name or id)

Table 31.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 31.32. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 31.33. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.34. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 31.35. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

31.11. ENDPOINT LIST

List endpoints

Usage:

```
openstack endpoint list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--service <service>] [--interface <interface>]
                        [--region <region-id>]
                        [--endpoint <endpoint-group> | --project <project>]
                        [--project-domain <project-domain>]
```

Table 31.36. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--service <service></code>	Filter by service (type, name or id)
<code>--interface <interface></code>	Filter by interface type (admin, public or internal)
<code>--region <region-id></code>	Filter by region id
<code>--endpoint <endpoint-group></code>	Endpoint to list filters
<code>--project <project></code>	Project to list filters (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 31.37. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 31.38. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 31.39. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 31.40. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

31.12. ENDPOINT REMOVE PROJECT

Dissociate a project from an endpoint

Usage:


```
openstack endpoint remove project [-h]
                                [--project-domain <project-domain>]
                                <endpoint> <project>
```

Table 31.41. Positional Arguments

Value	Summary
<endpoint>	Endpoint to dissociate from specified project (name or ID)
<project>	Project to dissociate from specified endpoint name or ID)

Table 31.42. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

31.13. ENDPOINT SET

Set endpoint properties

Usage:

```
openstack endpoint set [-h] [--region <region-id>]
                      [--interface <interface>] [--url <url>]
                      [--service <service>] [--enable | --disable]
                      <endpoint-id>
```

Table 31.43. Positional Arguments

Value	Summary
<endpoint-id>	Endpoint to modify (id only)

Table 31.44. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--region <region-id>	New endpoint region id

Value	Summary
--interface <interface>	New endpoint interface type (admin, public or internal)
--url <url>	New endpoint url
--service <service>	New endpoint service (name or id)
--enable	Enable endpoint
--disable	Disable endpoint

31.14. ENDPOINT SHOW

Display endpoint details

Usage:

```
openstack endpoint show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <endpoint>
```

Table 31.45. Positional Arguments

Value	Summary
<endpoint>	Endpoint to display (endpoint id, service id, service name, service type)

Table 31.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 31.47. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 31.48. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 31.49. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 31.50. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 32. EVENT

This chapter describes the commands under the **event** command.

32.1. EVENT TRIGGER CREATE

Create new trigger.

Usage:

```
openstack event trigger create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--params PARAMS]
                             name workflow_id exchange topic event
                             [workflow_input]
```

Table 32.1. Positional Arguments

Value	Summary
name	Event trigger name
workflow_id	Workflow id
exchange	Event trigger exchange
topic	Event trigger topic
event	Event trigger event name
workflow_input	Workflow input

Table 32.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--params PARAMS	Workflow params

Table 32.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 32.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 32.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 32.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

32.2. EVENT TRIGGER DELETE

Delete trigger.

Usage:

```
openstack event trigger delete [-h]
                               event_trigger_id [event_trigger_id ...]
```

Table 32.7. Positional Arguments

Value	Summary
event_trigger_id	Id of event trigger(s).

Table 32.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

32.3. EVENT TRIGGER LIST

List all event triggers.

Usage:

```

openstack event trigger list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--marker [MARKER]] [--limit [LIMIT]]
                             [--sort_keys [SORT_KEYS]]
                             [--sort_dirs [SORT_DIRS]]
                             [--filter FILTERS]

```

Table 32.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Table 32.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 32.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 32.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 32.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

32.4. EVENT TRIGGER SHOW

Show specific event trigger.

Usage:

```
openstack event trigger show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty]
event_trigger

```

Table 32.14. Positional Arguments

Value	Summary
event_trigger	Event trigger id

Table 32.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 32.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 32.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 32.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 32.19. Table Formatter

Value	Summary
-------	---------

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 33. EXTENSION

This chapter describes the commands under the **extension** command.

33.1. EXTENSION LIST

List API extensions

Usage:

```
openstack extension list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--compute]
                        [--identity] [--network] [--volume] [--long]
```

Table 33.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--compute	List extensions for the compute api
--identity	List extensions for the identity api
--network	List extensions for the network api
--volume	List extensions for the block storage api
--long	List additional fields in output

Table 33.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 33.3. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 33.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 33.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

33.2. EXTENSION SHOW

Show API extension

Usage:

```
openstack extension show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <extension>
```

Table 33.6. Positional Arguments

Value	Summary
<code><extension></code>	Extension to display. currently, only network extensions are supported. (Name or Alias)

Table 33.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 33.8. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 33.9. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 33.10. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 33.11. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 34. FEDERATION

This chapter describes the commands under the **federation** command.

34.1. FEDERATION DOMAIN LIST

List accessible domains

Usage:

```
openstack federation domain list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
```

Table 34.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 34.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 34.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 34.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 34.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

34.2. FEDERATION PROJECT LIST

List accessible projects

Usage:

```
openstack federation project list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
```

Table 34.6. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 34.7. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 34.8. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 34.9. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 34.10. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

34.3. FEDERATION PROTOCOL CREATE

Create new federation protocol

Usage:

```
openstack federation protocol create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     --identity-provider
                                     <identity-provider> --mapping
                                     <mapping>
                                     <name>
```

Table 34.11. Positional Arguments

Value	Summary
<code><name></code>	New federation protocol name (must be unique per identity provider)

Table 34.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--identity-provider <identity-provider>	Identity provider that will support the new federation protocol (name or ID) (required)
--mapping <mapping>	Mapping that is to be used (name or id) (required)

Table 34.13. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 34.14. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 34.15. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 34.16. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

34.4. FEDERATION PROTOCOL DELETE

Delete federation protocol(s)

Usage:

```
openstack federation protocol delete [-h] --identity-provider
    <identity-provider>
    <federation-protocol>
    [<federation-protocol> ...]
```

Table 34.17. Positional Arguments

Value	Summary
<federation-protocol>	Federation protocol(s) to delete (name or id)

Table 34.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--identity-provider <identity-provider>	Identity provider that supports <federation-protocol> (name or ID) (required)

34.5. FEDERATION PROTOCOL LIST

List federation protocols

Usage:

```
openstack federation protocol list [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    --identity-provider
    <identity-provider>
```

Table 34.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--identity-provider <identity-provider>	Identity provider to list (name or id) (required)

Table 34.20. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 34.21. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 34.22. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 34.23. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

34.6. FEDERATION PROTOCOL SET

Set federation protocol properties

Usage:

```
openstack federation protocol set [-h] --identity-provider
<identity-provider>
```

```

[--mapping <mapping>]
<name>

```

Table 34.24. Positional Arguments

Value	Summary
<name>	Federation protocol to modify (name or id)

Table 34.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--identity-provider <identity-provider>	Identity provider that supports <federation-protocol> (name or ID) (required)
--mapping <mapping>	Mapping that is to be used (name or id)

34.7. FEDERATION PROTOCOL SHOW

Display federation protocol details

Usage:

```

openstack federation protocol show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]
                                  [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  --identity-provider
                                  <identity-provider>
                                  <federation-protocol>

```

Table 34.26. Positional Arguments

Value	Summary
<federation-protocol>	Federation protocol to display (name or id)

Table 34.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--identity-provider <identity-provider></code>	Identity provider that supports <federation-protocol> (name or ID) (required)

Table 34.28. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 34.29. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 34.30. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 34.31. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 35. FLAVOR

This chapter describes the commands under the **flavor** command.

35.1. FLAVOR CREATE

Create new flavor

Usage:

```
openstack flavor create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--id <id>] [--ram <size-mb>]
                        [--disk <size-gb>] [--ephemeral <size-gb>]
                        [--swap <size-mb>] [--vcpus <vcpus>]
                        [--rxtx-factor <factor>] [--public | --private]
                        [--property <key=value>] [--project <project>]
                        [--description <description>]
                        [--project-domain <project-domain>]
                        <flavor-name>
```

Table 35.1. Positional Arguments

Value	Summary
<flavor-name>	New flavor name

Table 35.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--id <id>	Unique flavor id; <i>auto</i> creates a uuid (default: auto)
--ram <size-mb>	Memory size in mb (default 256m)
--disk <size-gb>	Disk size in gb (default 0g)
--ephemeral <size-gb>	Ephemeral disk size in gb (default 0g)
--swap <size-mb>	Additional swap space size in mb (default 0m)
--vcpus <vcpus>	Number of vcpus (default 1)
--rxtx-factor <factor>	Rx/tx factor (default 1.0)
--public	Flavor is available to other projects (default)

Value	Summary
<code>--private</code>	Flavor is not available to other projects
<code>--property <key=value></code>	Property to add for this flavor (repeat option to set multiple properties)
<code>--project <project></code>	Allow <project> to access private flavor (name or id) (Must be used with <code>--private</code> option)
<code>--description <description></code>	Description for the flavor.(supported by api versions <i>2.55 - 2.latest</i>)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 35.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 35.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 35.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 35.6. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

35.2. FLAVOR DELETE

Delete flavor(s)

Usage:

```
openstack flavor delete [-h] <flavor> [<flavor> ...]
```

Table 35.7. Positional Arguments

Value	Summary
<code><flavor></code>	Flavor(s) to delete (name or id)

Table 35.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

35.3. FLAVOR LIST

List flavors

Usage:

```
openstack flavor list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN]
                    [--public | --private | --all] [--long]
                    [--marker <flavor-id>] [--limit <num-flavors>]
```

Table 35.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--public	List only public flavors (default)
--private	List only private flavors
--all	List all flavors, whether public or private
--long	List additional fields in output
--marker <flavor-id>	The last flavor id of the previous page
--limit <num-flavors>	Maximum number of flavors to display

Table 35.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 35.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 35.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 35.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

35.4. FLAVOR SET

Set flavor properties

Usage:

```
openstack flavor set [-h] [--no-property] [--property <key=value>]
                    [--project <project>]
                    [--description <description>]
                    [--project-domain <project-domain>]
                    <flavor>
```

Table 35.14. Positional Arguments

Value	Summary
<code><flavor></code>	Flavor to modify (name or id)

Table 35.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--no-property</code>	Remove all properties from this flavor (specify both <code>--no-property</code> and <code>--property</code> to remove the current properties before setting new properties.)
<code>--property <key=value></code>	Property to add or modify for this flavor (repeat option to set multiple properties)
<code>--project <project></code>	Set flavor access to project (name or id) (admin only)
<code>--description <description></code>	Set description for the flavor.(supported by api versions <i>2.55 - 2.latest</i>)

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

35.5. FLAVOR SHOW

Display flavor details

Usage:

```

openstack flavor show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <flavor>

```

Table 35.16. Positional Arguments

Value	Summary
<code><flavor></code>	Flavor to display (name or id)

Table 35.17. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 35.18. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 35.19. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 35.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 35.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

35.6. FLAVOR UNSET

Unset flavor properties

Usage:

```
openstack flavor unset [-h] [--property <key>] [--project <project>]
                        [--project-domain <project-domain>]
                        <flavor>
```

Table 35.22. Positional Arguments

Value	Summary
<flavor>	Flavor to modify (name or id)

Table 35.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from flavor (repeat option to unset multiple properties)
--project <project>	Remove flavor access from project (name or id) (admin only)

Value	Summary
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

CHAPTER 36. FLOATING

This chapter describes the commands under the **floating** command.

36.1. FLOATING IP CREATE

Create floating IP

Usage:

```
openstack floating ip create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--subnet <subnet>]
                             [--port <port>]
                             [--floating-ip-address <ip-address>]
                             [--fixed-ip-address <ip-address>]
                             [--qos-policy <qos-policy>]
                             [--description <description>]
                             [--project <project>]
                             [--dns-domain <dns-domain>]
                             [--dns-name <dns-name>]
                             [--project-domain <project-domain>]
                             [--tag <tag> | --no-tag]
                             <network>
```

Table 36.1. Positional Arguments

Value	Summary
<network>	Network to allocate floating ip from (name or id)

Table 36.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--subnet <subnet>	Subnet on which you want to create the floating ip (name or ID)
--port <port>	Port to be associated with the floating ip (name or ID)
--floating-ip-address <ip-address>	Floating ip address
--fixed-ip-address <ip-address>	Fixed ip address mapped to the floating ip
--qos-policy <qos-policy>	Attach qos policy to the floating ip (name or id)

Value	Summary
<code>--description <description></code>	Set floating ip description
<code>--project <project></code>	Owner's project (name or id)
<code>--dns-domain <dns-domain></code>	Set dns domain for this floating ip
<code>--dns-name <dns-name></code>	Set dns name for this floating ip
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--tag <tag></code>	Tag to be added to the floating ip (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the floating ip

Table 36.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 36.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 36.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 36.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

36.2. FLOATING IP DELETE

Delete floating IP(s)

Usage:

```
openstack floating ip delete [-h] <floating-ip> [<floating-ip> ...]
```

Table 36.7. Positional Arguments

Value	Summary
<code><floating-ip></code>	Floating ip(s) to delete (ip address or id)

Table 36.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

36.3. FLOATING IP LIST

List floating IP(s)

Usage:

```
openstack floating ip list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--network <network>] [--port <port>]
                          [--fixed-ip-address <ip-address>]
                          [--floating-ip-address <ip-address>]
                          [--long] [--status <status>]
```

```

[--project <project>]
[--project-domain <project-domain>]
[--router <router>]
[--tags <tag>[,<tag>,...]]
[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]

```

Table 36.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--network <network>	List floating ip(s) according to given network (name or ID)
--port <port>	List floating ip(s) according to given port (name or ID)
--fixed-ip-address <ip-address>	List floating ip(s) according to given fixed ip address
--floating-ip-address <ip-address>	List floating ip(s) according to given floating ip address
--long	List additional fields in output
--status <status>	List floating ip(s) according to given status (<i>ACTIVE</i> , <i>DOWN</i>)
--project <project>	List floating ip(s) according to given project (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--router <router>	List floating ip(s) according to given router (name or ID)
--tags <tag>[,<tag>,...]	List floating ip which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List floating ip which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude floating ip which have all given tag(s) (Comma-separated list of tags)

Value	Summary
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude floating ip which have any given tag(s) (Comma-separated list of tags)

Table 36.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 36.11. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 36.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 36.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

36.4. FLOATING IP POOL LIST

List pools of floating IP addresses

Usage:

```
openstack floating ip pool list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
```

Table 36.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 36.15. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 36.16. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 36.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 36.18. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

36.5. FLOATING IP SET

Set floating IP Properties

Usage:

```
openstack floating ip set [-h] [--port <port>]
                        [--fixed-ip-address <ip-address>]
                        [--qos-policy <qos-policy> | --no-qos-policy]
                        [--tag <tag>] [--no-tag]
                        <floating-ip>
```

Table 36.19. Positional Arguments

Value	Summary
<code><floating-ip></code>	Floating ip to modify (ip address or id)

Table 36.20. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--port <port></code>	Associate the floating ip with port (name or id)
<code>--fixed-ip-address <ip-address></code>	Fixed ip of the port (required only if port has multiple IPs)
<code>--qos-policy <qos-policy></code>	Attach qos policy to the floating ip (name or id)
<code>--no-qos-policy</code>	Remove the qos policy attached to the floating ip

Value	Summary
--tag <tag>	Tag to be added to the floating ip (repeat option to set multiple tags)
--no-tag	Clear tags associated with the floating ip. specify both --tag and --no-tag to overwrite current tags

36.6. FLOATING IP SHOW

Display floating IP details

Usage:

```
openstack floating ip show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <floating-ip>
```

Table 36.21. Positional Arguments

Value	Summary
<floating-ip>	Floating ip to display (ip address or id)

Table 36.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 36.23. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 36.24. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 36.25. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 36.26. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

36.7. FLOATING IP UNSET

Unset floating IP Properties

Usage:

```
openstack floating ip unset [-h] [--port] [--qos-policy]
                             [--tag <tag> | --all-tag]
                             <floating-ip>
```

Table 36.27. Positional Arguments

Value	Summary
<floating-ip>	Floating ip to disassociate (ip address or id)

Table 36.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--port	Disassociate any port associated with the floating ip
--qos-policy	Remove the qos policy attached to the floating ip

Value	Summary
--tag <tag>	Tag to be removed from the floating ip (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the floating ip

CHAPTER 37. GROUP

This chapter describes the commands under the **group** command.

37.1. GROUP ADD USER

Add user to group

Usage:

```
openstack group add user [-h] [--group-domain <group-domain>]
                        [--user-domain <user-domain>]
                        <group> <user> [<user> ...]
```

Table 37.1. Positional Arguments

Value	Summary
<group>	Group to contain <user> (name or id)
<user>	User(s) to add to <group> (name or id) (repeat option to add multiple users)

Table 37.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--group-domain <group-domain>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

37.2. GROUP CONTAINS USER

Check user membership in group

Usage:

```
openstack group contains user [-h] [--group-domain <group-domain>]
                              [--user-domain <user-domain>]
                              <group> <user>
```

Table 37.3. Positional Arguments

Value	Summary
<group>	Group to check (name or id)
<user>	User to check (name or id)

Table 37.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--group-domain <group-domain>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

37.3. GROUP CREATE

Create new group

Usage:

```
openstack group create [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [--domain <domain>]
                       [--description <description>] [--or-show]
                       <group-name>
```

Table 37.5. Positional Arguments

Value	Summary
<group-name>	New group name

Table 37.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain to contain new group (name or id)
--description <description>	New group description

Value	Summary
<code>--or-show</code>	Return existing group

Table 37.7. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 37.8. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 37.9. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 37.10. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

37.4. GROUP DELETE

Delete group(s)

Usage:

```
openstack group delete [-h] [--domain <domain>] <group> [<group> ...]
```

Table 37.11. Positional Arguments

Value	Summary
<group>	Group(s) to delete (name or id)

Table 37.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain containing group(s) (name or id)

37.5. GROUP LIST

List groups

Usage:

```
openstack group list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--domain <domain>] [--user <user>]
                    [--user-domain <user-domain>] [--long]
```

Table 37.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Filter group list by <domain> (name or id)
--user <user>	Filter group list by <user> (name or id)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--long	List additional fields in output

Table 37.14. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 37.15. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 37.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 37.17. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

37.6. GROUP REMOVE USER

Remove user from group

Usage:

```
openstack group remove user [-h] [--group-domain <group-domain>]
                             [--user-domain <user-domain>]
                             <group> <user> [<user> ...]
```

Table 37.18. Positional Arguments

Value	Summary
<group>	Group containing <user> (name or id)
<user>	User(s) to remove from <group> (name or id) (repeat option to remove multiple users)

Table 37.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--group-domain <group-domain>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

37.7. GROUP SET

Set group properties

Usage:

```
openstack group set [-h] [--domain <domain>] [--name <name>]
                   [--description <description>]
                   <group>
```

Table 37.20. Positional Arguments

Value	Summary
<group>	Group to modify (name or id)

Table 37.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain containing <group> (name or id)
--name <name>	New group name

Value	Summary
<code>--description <description></code>	New group description

37.8. GROUP SHOW

Display group details

Usage:

```
openstack group show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--domain <domain>]
                    <group>
```

Table 37.22. Positional Arguments

Value	Summary
<code><group></code>	Group to display (name or id)

Table 37.23. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--domain <domain></code>	Domain containing <code><group></code> (name or id)

Table 37.24. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 37.25. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 37.26. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 37.27. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 38. HELP.ADOC

This chapter describes the commands under the **help.adoc** command.

38.1. HELP

print detailed help for another command

Usage:

```
openstack help [-h] [cmd [cmd ...]]
```

Table 38.1. Positional Arguments

Value	Summary
cmd	Name of the command

Table 38.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

CHAPTER 39. HOST

This chapter describes the commands under the **host** command.

39.1. HOST LIST

List hosts

Usage:

```
openstack host list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--zone <zone>]
```

Table 39.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--zone <zone>	Only return hosts in the availability zone

Table 39.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 39.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

39.2. HOST SET

Set host properties

Usage:

```
openstack host set [-h] [--enable | --disable]
                  [--enable-maintenance | --disable-maintenance]
                  <host>
```

Table 39.6. Positional Arguments

Value	Summary
<host>	Host to modify (name only)

Table 39.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--enable	Enable the host
--disable	Disable the host
--enable-maintenance	Enable maintenance mode for the host
--disable-maintenance	Disable maintenance mode for the host

39.3. HOST SHOW

Display host details

Usage:

```
openstack host show [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    <host>
```

Table 39.8. Positional Arguments

Value	Summary
<host>	Name of host

Table 39.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 39.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 39.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 39.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 39.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 40. HYPERVISOR

This chapter describes the commands under the **hypervisor** command.

40.1. HYPERVISOR LIST

List hypervisors

Usage:

```
openstack hypervisor list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--matching <hostname>] [--long]
```

Table 40.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--matching <hostname>	Filter hypervisors using <hostname> substring
--long	List additional fields in output

Table 40.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 40.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 40.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

40.2. HYPERVISOR SHOW

Display hypervisor details

Usage:

```
openstack hypervisor show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <hypervisor>
```

Table 40.6. Positional Arguments

Value	Summary
<hypervisor>	Hypervisor to display (name or id)

Table 40.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 40.8. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 40.9. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.10. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 40.11. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

40.3. HYPERVISOR STATS SHOW

Display hypervisor stats details

Usage:

```
openstack hypervisor stats show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
```

-

Table 40.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 40.13. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 40.14. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 40.15. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 40.16. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 41. IDENTITY

This chapter describes the commands under the **identity** command.

41.1. IDENTITY PROVIDER CREATE

Create new identity provider

Usage:

```
openstack identity provider create [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]
                                  [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--remote-id <remote-id> | --remote-id-file <file-name>]
                                  [--description <description>]
                                  [--domain <domain>]
                                  [--enable | --disable]
                                  <name>
```

Table 41.1. Positional Arguments

Value	Summary
<name>	New identity provider name (must be unique)

Table 41.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--remote-id <remote-id>	Remote ids to associate with the identity provider (repeat option to provide multiple values)
--remote-id-file <file-name>	Name of a file that contains many remote ids to associate with the identity provider, one per line
--description <description>	New identity provider description
--domain <domain>	Domain to associate with the identity provider. if not specified, a domain will be created automatically. (Name or ID)
--enable	Enable identity provider (default)
--disable	Disable the identity provider

Table 41.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 41.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

41.2. IDENTITY PROVIDER DELETE

Delete identity provider(s)

Usage:

```
openstack identity provider delete [-h]
                                <identity-provider>
                                [<identity-provider> ...]
```

Table 41.7. Positional Arguments

Value	Summary
<identity-provider>	Identity provider(s) to delete

Table 41.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

41.3. IDENTITY PROVIDER LIST

List identity providers

Usage:

```

openstack identity provider list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]

```

Table 41.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 41.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 41.11. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 41.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 41.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

41.4. IDENTITY PROVIDER SET

Set identity provider properties

Usage:

```
openstack identity provider set [-h] [--description <description>]
                               [--remote-id <remote-id> | --remote-id-file <file-name>]
                               [--enable | --disable]
                               <identity-provider>
```

Table 41.14. Positional Arguments

Value	Summary
<code><identity-provider></code>	Identity provider to modify

Table 41.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--description <description></code>	Set identity provider description
<code>--remote-id <remote-id></code>	Remote ids to associate with the identity provider (repeat option to provide multiple values)
<code>--remote-id-file <file-name></code>	Name of a file that contains many remote ids to associate with the identity provider, one per line
<code>--enable</code>	Enable the identity provider
<code>--disable</code>	Disable the identity provider

41.5. IDENTITY PROVIDER SHOW

Display identity provider details

Usage:

```

openstack identity provider show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <identity-provider>

```

Table 41.16. Positional Arguments

Value	Summary
<code><identity-provider></code>	Identity provider to display

Table 41.17. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 41.18. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 41.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 41.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 41.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 42. IMAGE

This chapter describes the commands under the **image** command.

42.1. IMAGE ADD PROJECT

Associate project with image

Usage:

```
openstack image add project [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             [--project-domain <project-domain>]
                             <image> <project>
```

Table 42.1. Positional Arguments

Value	Summary
<image>	Image to share (name or id)
<project>	Project to associate with image (id)

Table 42.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 42.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 42.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 42.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 42.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

42.2. IMAGE CREATE

Create/upload an image

Usage:

```
openstack image create [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent] [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty] [--id <id>]
    [--container-format <container-format>]
    [--disk-format <disk-format>]
    [--min-disk <disk-gb>] [--min-ram <ram-mb>]
    [--file <file> | --volume <volume>] [--force]
    [--sign-key-path <sign-key-path>]
    [--sign-cert-id <sign-cert-id>]
    [--protected | --unprotected]
    [--public | --private | --community | --shared]
    [--property <key=value>] [--tag <tag>]
    [--project <project>]
    [--project-domain <project-domain>]
    <image-name>
```

Table 42.7. Positional Arguments

Value	Summary
<image-name>	New image name

Table 42.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--id <id>	Image id to reserve
--container-format <container-format>	Image container format. the supported options are: ami, ari, aki, bare, docker, ova, ovf. The default format is: bare
--disk-format <disk-format>	Image disk format. the supported options are: ami, ari, aki, vhd, vmdk, raw, qcow2, vhdx, vdi, iso, ploop. The default format is: raw
--min-disk <disk-gb>	Minimum disk size needed to boot image, in gigabytes
--min-ram <ram-mb>	Minimum ram size needed to boot image, in megabytes
--file <file>	Upload image from local file
--volume <volume>	Create image from a volume
--force	Force image creation if volume is in use (only meaningful with --volume)
--sign-key-path <sign-key-path>	Sign the image using the specified private key. only use in combination with --sign-cert-id
--sign-cert-id <sign-cert-id>	The specified certificate uuid is a reference to the certificate in the key manager that corresponds to the public key and is used for signature validation. Only use in combination with --sign-key-path
--protected	Prevent image from being deleted
--unprotected	Allow image to be deleted (default)
--public	Image is accessible to the public
--private	Image is inaccessible to the public (default)

Value	Summary
<code>--community</code>	Image is accessible to the community
<code>--shared</code>	Image can be shared
<code>--property <key=value></code>	Set a property on this image (repeat option to set multiple properties)
<code>--tag <tag></code>	Set a tag on this image (repeat option to set multiple tags)
<code>--project <project></code>	Set an alternate project on this image (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 42.9. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 42.10. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 42.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 42.12. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

42.3. IMAGE DELETE

Delete image(s)

Usage:

```
openstack image delete [-h] <image> [<image> ...]
```

Table 42.13. Positional Arguments

Value	Summary
<code><image></code>	Image(s) to delete (name or id)

Table 42.14. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

42.4. IMAGE LIST

List available images

Usage:

```
openstack image list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>] [--fit-width]
    [--print-empty] [--sort-column SORT_COLUMN]
    [--public | --private | --community | --shared]
    [--property <key=value>] [--name <name>]
    [--status <status>]
```

```

[--member-status <member-status>] [--tag <tag>]
[--long] [--sort <key>[:<direction>]]
[--limit <num-images>] [--marker <image>]

```

Table 42.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--public	List only public images
--private	List only private images
--community	List only community images
--shared	List only shared images
--property <key=value>	Filter output based on property (repeat option to filter on multiple properties)
--name <name>	Filter images based on name.
--status <status>	Filter images based on status.
--member-status <member-status>	Filter images based on member status. the supported options are: accepted, pending, rejected, all.
--tag <tag>	Filter images based on tag.
--long	List additional fields in output
--sort <key>[:<direction>]	Sort output by selected keys and directions(asc or desc) (default: name:asc), multiple keys and directions can be specified separated by comma
--limit <num-images>	Maximum number of images to display.
--marker <image>	The last image of the previous page. display list of images after marker. Display all images if not specified. (name or ID)

Table 42.16. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 42.17. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 42.18. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 42.19. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

42.5. IMAGE MEMBER LIST

List projects associated with image

Usage:

```

openstack image member list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--project-domain <project-domain>]
                             <image>

```

Table 42.20. Positional Arguments

Value	Summary
<image>	Image (name or id)

Table 42.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 42.22. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 42.23. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 42.24. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 42.25. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

42.6. IMAGE REMOVE PROJECT

Disassociate project with image

Usage:

```
openstack image remove project [-h] [--project-domain <project-domain>]
                               <image> <project>
```

Table 42.26. Positional Arguments

Value	Summary
<code><image></code>	Image to unshare (name or id)
<code><project></code>	Project to disassociate with image (name or id)

Table 42.27. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

42.7. IMAGE SAVE

Save an image locally

Usage:

```
openstack image save [-h] [--file <filename>] <image>
```

Table 42.28. Positional Arguments

Value	Summary
<image>	Image to save (name or id)

Table 42.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--file <filename>	Downloaded image save filename (default: stdout)

42.8. IMAGE SET

Set image properties

Usage:

```

openstack image set [-h] [--name <name>] [--min-disk <disk-gb>]
                    [--min-ram <ram-mb>]
                    [--container-format <container-format>]
                    [--disk-format <disk-format>]
                    [--protected | --unprotected]
                    [--public | --private | --community | --shared]
                    [--property <key=value>] [--tag <tag>]
                    [--architecture <architecture>]
                    [--instance-id <instance-id>]
                    [--kernel-id <kernel-id>] [--os-distro <os-distro>]
                    [--os-version <os-version>]
                    [--ramdisk-id <ramdisk-id>]
                    [--deactivate | --activate] [--project <project>]
                    [--project-domain <project-domain>]
                    [--accept | --reject | --pending]
                    <image>

```

Table 42.30. Positional Arguments

Value	Summary
<image>	Image to modify (name or id)

Table 42.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--name <name></code>	New image name
<code>--min-disk <disk-gb></code>	Minimum disk size needed to boot image, in gigabytes
<code>--min-ram <ram-mb></code>	Minimum ram size needed to boot image, in megabytes
<code>--container-format <container-format></code>	Image container format. the supported options are: ami, ari, aki, bare, docker, ova, ovf
<code>--disk-format <disk-format></code>	Image disk format. the supported options are: ami, ari, aki, vhd, vmdk, raw, qcow2, vhdx, vdi, iso, ploop
<code>--protected</code>	Prevent image from being deleted
<code>--unprotected</code>	Allow image to be deleted (default)
<code>--public</code>	Image is accessible to the public
<code>--private</code>	Image is inaccessible to the public (default)
<code>--community</code>	Image is accessible to the community
<code>--shared</code>	Image can be shared
<code>--property <key=value></code>	Set a property on this image (repeat option to set multiple properties)
<code>--tag <tag></code>	Set a tag on this image (repeat option to set multiple tags)
<code>--architecture <architecture></code>	Operating system architecture
<code>--instance-id <instance-id></code>	Id of server instance used to create this image
<code>--kernel-id <kernel-id></code>	Id of kernel image used to boot this disk image
<code>--os-distro <os-distro></code>	Operating system distribution name
<code>--os-version <os-version></code>	Operating system distribution version
<code>--ramdisk-id <ramdisk-id></code>	Id of ramdisk image used to boot this disk image
<code>--deactivate</code>	Deactivate the image

Value	Summary
--activate	Activate the image
--project <project>	Set an alternate project on this image (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--accept	Accept the image membership
--reject	Reject the image membership
--pending	Reset the image membership to <i>pending</i>

42.9. IMAGE SHOW

Display image details

Usage:

```
openstack image show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--human-readable]
                    <image>
```

Table 42.32. Positional Arguments

Value	Summary
<image>	Image to display (name or id)

Table 42.33. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--human-readable	Print image size in a human-friendly format.

Table 42.34. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 42.35. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 42.36. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 42.37. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

42.10. IMAGE UNSET

Unset image tags and properties

Usage:

```
openstack image unset [-h] [--tag <tag>] [--property <property-key>]
<image>
```

Table 42.38. Positional Arguments

Value	Summary
<image>	Image to modify (name or id)

Table 42.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--tag <tag>	Unset a tag on this image (repeat option to unset multiple tags)
--property <property-key>	Unset a property on this image (repeat option to unset multiple properties)

CHAPTER 43. IMPLIED

This chapter describes the commands under the **implied** command.

43.1. IMPLIED ROLE CREATE

Creates an association between prior and implied roles

Usage:

```
openstack implied role create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             --implied-role <role>
                             <role>
```

Table 43.1. Positional Arguments

Value	Summary
<role>	Role (name or id) that implies another role

Table 43.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--implied-role <role>	<role> (name or id) implied by another role

Table 43.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 43.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 43.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

43.2. IMPLIED ROLE DELETE

Deletes an association between prior and implied roles

Usage:

```
openstack implied role delete [-h] --implied-role <role> <role>
```

Table 43.7. Positional Arguments

Value	Summary
<role>	Role (name or id) that implies another role

Table 43.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--implied-role <role>	<role> (name or id) implied by another role

43.3. IMPLIED ROLE LIST

List implied roles

Usage:

```

openstack implied role list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]

```

Table 43.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 43.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 43.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 43.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 43.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 44. IP

This chapter describes the commands under the **ip** command.

44.1. IP AVAILABILITY LIST

List IP availability for network

Usage:

```
openstack ip availability list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--ip-version <ip-version>]
                             [--project <project>]
                             [--project-domain <project-domain>]
```

Table 44.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--ip-version <ip-version>	List ip availability of given ip version networks (default is 4)
--project <project>	List ip availability of given project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 44.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 44.3. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 44.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 44.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

44.2. IP AVAILABILITY SHOW

Show network IP availability details

Usage:

```
openstack ip availability show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <network>
```

Table 44.6. Positional Arguments

Value	Summary
<code><network></code>	Show ip availability for a specific network (name or ID)

Table 44.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 44.8. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 44.9. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 44.10. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 44.11. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 45. KEYPAIR

This chapter describes the commands under the **keypair** command.

45.1. KEYPAIR CREATE

Create new public or private key for server ssh access

Usage:

```
openstack keypair create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        [--public-key <file> | --private-key <file>]
                        <name>
```

Table 45.1. Positional Arguments

Value	Summary
<name>	New public or private key name

Table 45.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--public-key <file>	Filename for public key to add. if not used, creates a private key.
--private-key <file>	Filename for private key to save. if not used, print private key in console.

Table 45.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 45.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 45.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 45.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

45.2. KEYPAIR DELETE

Delete public or private key(s)

Usage:

```
openstack keypair delete [-h] <key> [<key> ...]
```

Table 45.7. Positional Arguments

Value	Summary
<key>	Name of key(s) to delete (name only)

Table 45.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

45.3. KEYPAIR LIST

List key fingerprints

Usage:

```
openstack keypair list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
```

Table 45.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 45.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 45.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 45.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 45.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

45.4. KEYPAIR SHOW

Display key details

Usage:

```
openstack keypair show [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [--public-key]
                       <key>
```

Table 45.14. Positional Arguments

Value	Summary
<code><key></code>	Public or private key to display (name only)

Table 45.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--public-key</code>	Show only bare public key paired with the generated key

Table 45.16. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 45.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 45.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 45.19. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 46. L2GW

This chapter describes the commands under the **l2gw** command.

46.1. L2GW CONNECTION CREATE

Create l2gateway-connection

Usage:

```
openstack l2gw connection create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--default-segmentation-id SEG_ID]
                                <GATEWAY-NAME/UUID>
                                <NETWORK-NAME/UUID>
```

Table 46.1. Positional Arguments

Value	Summary
<GATEWAY-NAME/UUID>	Descriptive name for logical gateway.
<NETWORK-NAME/UUID>	Network name or uuid.

Table 46.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--default-segmentation-id SEG_ID	Default segmentation-id that will be applied to the interfaces for which segmentation id was not specified in l2-gateway-create command.

Table 46.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 46.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 46.5. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 46.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

46.2. L2GW CONNECTION DELETE

Delete a given l2gateway-connection

Usage:

```
openstack l2gw connection delete [-h]
                                <L2_GATEWAY_CONNECTIONS>
                                [<L2_GATEWAY_CONNECTIONS> ...]
```

Table 46.7. Positional Arguments

Value	Summary
<code><L2_GATEWAY_CONNECTIONS></code>	Id(s) of l2_gateway_connections(s) to delete.

Table 46.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

46.3. L2GW CONNECTION LIST

List l2gateway-connections

Usage:

```
openstack l2gw connection list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--project <project>]
                               [--project-domain <project-domain>]
```

Table 46.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 46.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 46.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 46.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

46.4. L2GW CONNECTION SHOW

Show information of a given l2gateway-connection

Usage:

```
openstack l2gw connection show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <L2_GATEWAY_CONNECTION>
```

Table 46.14. Positional Arguments

Value	Summary
<L2_GATEWAY_CONNECTION>	Id of l2_gateway_connection to look up.

Table 46.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 46.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 46.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 46.19. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

46.5. L2GW CREATE

Create l2gateway resource

Usage:

```
openstack l2gw create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--project <project>]
```

```

[--project-domain <project-domain>]
[--device name=name,interface_names=INTERFACE-DETAILS]
<GATEWAY-NAME>

```

Table 46.20. Positional Arguments

Value	Summary
<GATEWAY-NAME>	Descriptive name for logical gateway.

Table 46.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--device name=name,interface_names=INTERFACE-DETAILS	Device name and interface-names of l2gateway. INTERFACE-DETAILS is of form "<interface_name1> [<interface_name2>"]

Table 46.22. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 46.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 46.25. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

46.6. L2GW DELETE

Delete a given l2gateway

Usage:

```
openstack l2gw delete [-h] <L2_GATEWAY> [<L2_GATEWAY> ...]
```

Table 46.26. Positional Arguments

Value	Summary
<L2_GATEWAY>	Id(s) or name(s) of l2_gateway to delete.

Table 46.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

46.7. L2GW LIST

List l2gateway that belongs to a given tenant

Usage:

```
openstack l2gw list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
```

```

[--noindent] [--max-width <integer>] [--fit-width]
[--print-empty] [--sort-column SORT_COLUMN]
[--project <project>]
[--project-domain <project-domain>]

```

Table 46.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 46.29. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 46.30. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 46.31. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.32. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

46.8. L2GW SHOW

Show information of a given l2gateway

Usage:

```
openstack l2gw show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <L2_GATEWAY>
```

Table 46.33. Positional Arguments

Value	Summary
<code><L2_GATEWAY></code>	Id or name of l2_gateway to look up.

Table 46.34. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 46.35. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 46.36. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.37. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 46.38. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

46.9. L2GW UPDATE

Update a given l2gateway

Usage:

```
openstack l2gw update [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--name name]
                    [--device name=name,interface_names=INTERFACE-DETAILS]
                    <L2_GATEWAY>
```

Table 46.39. Positional Arguments

Value	Summary
<L2_GATEWAY>	Id or name of l2_gateway to update.

Table 46.40. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name name	Descriptive name for logical gateway.
--device name=name,interface_names=INTERFACE-DETAILS	Device name and interface-names of l2gateway. INTERFACE-DETAILS is of form "<interface_name1> [<interface_name2>"]

Table 46.41. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 46.42. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 46.43. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 46.44. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 47. LIMIT

This chapter describes the commands under the **limit** command.

47.1. LIMIT CREATE

Create a limit

Usage:

```
openstack limit create [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [--description <description>]
                       [--region <region>] --project <project>
                       --service <service> --resource-limit
                       <resource-limit>
                       <resource-name>
```

Table 47.1. Positional Arguments

Value	Summary
<resource-name>	The name of the resource to limit

Table 47.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the limit
--region <region>	Region for the limit to affect.
--project <project>	Project to associate the resource limit to
--service <service>	Service responsible for the resource to limit
--resource-limit <resource-limit>	The resource limit for the project to assume

Table 47.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 47.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 47.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 47.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

47.2. LIMIT DELETE

Delete a limit

Usage:

```
openstack limit delete [-h] <limit-id> [<limit-id> ...]
```

Table 47.7. Positional Arguments

Value	Summary
<limit-id>	Limit to delete (id)

Table 47.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

47.3. LIMIT LIST

List limits

Usage:

```
openstack limit list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--service <service>]
                    [--resource-name <resource-name>]
                    [--region <region>] [--project <project>]
```

Table 47.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--service <service>	Service responsible for the resource to limit
--resource-name <resource-name>	The name of the resource to limit
--region <region>	Region for the registered limit to affect.
--project <project>	List resource limits associated with project

Table 47.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 47.11. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 47.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 47.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

47.4. LIMIT SET

Update information about a limit

Usage:

```

openstack limit set [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--description <description>]
                    [--resource-limit <resource-limit>]
                    <limit-id>

```

Table 47.14. Positional Arguments

Value	Summary
<code><limit-id></code>	Limit to update (id)

Table 47.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the limit
--resource-limit <resource-limit>	The resource limit for the project to assume

Table 47.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 47.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 47.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 47.19. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

47.5. LIMIT SHOW

Display limit details

Usage:

```
openstack limit show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <limit-id>
```

Table 47.20. Positional Arguments

Value	Summary
<limit-id>	Limit to display (id)

Table 47.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 47.22. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 47.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 47.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 47.25. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 48. LIMITS

This chapter describes the commands under the **limits** command.

48.1. LIMITS SHOW

Show compute and block storage limits

Usage:

```
openstack limits show [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] (--absolute | --rate)
                        [--reserved] [--project <project>]
                        [--domain <domain>]
```

Table 48.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--absolute	Show absolute limits
--rate	Show rate limits
--reserved	Include reservations count [only valid with --absolute]
--project <project>	Show limits for a specific project (name or id) [only valid with --absolute]
--domain <domain>	Domain the project belongs to (name or id) [only valid with --absolute]

Table 48.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 48.3. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 48.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 48.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 49. LOADBALANCER

This chapter describes the commands under the **loadbalancer** command.

49.1. LOADBALANCER AMPHORA CONFIGURE

Update the amphora agent configuration

Usage:

```
openstack loadbalancer amphora configure [-h] <amphora-id>
```

Table 49.1. Positional Arguments

Value	Summary
<amphora-id>	Uuid of the amphora to configure.

Table 49.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

49.2. LOADBALANCER AMPHORA FAILOVER

Force failover an amphora

Usage:

```
openstack loadbalancer amphora failover [-h] <amphora-id>
```

Table 49.3. Positional Arguments

Value	Summary
<amphora-id>	Uuid of the amphora.

Table 49.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

49.3. LOADBALANCER AMPHORA LIST

List amphorae

Usage:

```

openstack loadbalancer amphora list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--loadbalancer <loadbalancer>]
                                     [--compute-id <compute-id>]
                                     [--role {BACKUP,MASTER,STANDALONE}]
                                     [--status
{ALLOCATED,BOOTING,DELETED,ERROR,PENDING_CREATE,PENDING_DELETE,READY}]

```

Table 49.5. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--loadbalancer <loadbalancer>	Filter by load balancer (name or id).
--compute-id <compute-id>	Filter by compute id.
--role {BACKUP,MASTER,STANDALONE}	Filter by role.
--status {ALLOCATED,BOOTING,DELETED,ERROR,PENDING_CREATE,PENDING_DELETE,READY}, --provisioning-status {ALLOCATED,BOOTING,DELETED,ERROR,PENDING_CREATE,PENDING_DELETE,READY}	Filter by amphora provisioning status.

Table 49.6. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.7. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 49.8. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.9. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.4. LOADBALANCER AMPHORA SHOW

Show the details of a single amphora

Usage:

```
openstack loadbalancer amphora show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <amphora-id>
```

Table 49.10. Positional Arguments

Value	Summary
<code><amphora-id></code>	Uuid of the amphora.

Table 49.11. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.12. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.13. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.14. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.15. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.5. LOADBALANCER CREATE

Create a load balancer

Usage:

-

```

openstack loadbalancer create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--name <name>]
                             [--description <description>]
                             [--vip-address <vip_address>]
                             [--vip-port-id <vip_port_id>]
                             [--vip-subnet-id <vip_subnet_id>]
                             [--vip-network-id <vip_network_id>]
                             [--vip-qos-policy-id <vip_qos_policy_id>]
                             [--project <project>]
                             [--provider <provider>]
                             [--enable | --disable]
                             [--flavor <flavor>]

```

Table 49.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New load balancer name.
--description <description>	Set load balancer description.
--vip-address <vip_address>	Set the vip ip address.
--vip-qos-policy-id <vip_qos_policy_id>	Set qos policy id for vip port. unset with <i>none</i> .
--project <project>	Project for the load balancer (name or id).
--provider <provider>	Provider name for the load balancer.
--enable	Enable load balancer (default).
--disable	Disable load balancer.
--flavor <flavor>	The name or id of the flavor for the load balancer.

Table 49.17. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.18. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.19. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 49.20. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

Table 49.21. VIP Network

Value	Summary
At least one of the following arguments is required.-- <code>vip-port-id <vip_port_id></code>	Set port for the load balancer (name or id).
<code>--vip-subnet-id <vip_subnet_id></code>	Set subnet for the load balancer (name or id).
<code>--vip-network-id <vip_network_id></code>	Set network for the load balancer (name or id).

49.6. LOADBALANCER DELETE

Delete a load balancer

Usage:

```
openstack loadbalancer delete [-h] [--cascade] <load_balancer>
```

Table 49.22. Positional Arguments

Value	Summary
<load_balancer>	Load balancers to delete (name or id)

Table 49.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--cascade	Cascade the delete to all child elements of the load balancer.

49.7. LOADBALANCER FAILOVER

Trigger load balancer failover

Usage:

```
openstack loadbalancer failover [-h] <load_balancer>
```

Table 49.24. Positional Arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer.

Table 49.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

49.8. LOADBALANCER FLAVOR CREATE

Create a octavia flavor

Usage:

```
openstack loadbalancer flavor create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    --name <name> --flavorprofile
```

```
<flavor_profile>
[--description <description>]
[--enable | --disable]
```

Table 49.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New flavor name.
--flavorprofile <flavor_profile>	Flavor profile to add the flavor to (name or id).
--description <description>	Set flavor description.
--enable	Enable flavor.
--disable	Disable flavor.

Table 49.27. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.28. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.29. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.30. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.9. LOADBALANCER FLAVOR DELETE

Delete a flavor

Usage:

```
openstack loadbalancer flavor delete [-h] <flavor>
```

Table 49.31. Positional Arguments

Value	Summary
<code><flavor></code>	Flavor to delete (name or id)

Table 49.32. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

49.10. LOADBALANCER FLAVOR LIST

List flavor

Usage:

```
openstack loadbalancer flavor list [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--name <name>]
    [--flavorprofile <flavor_profile>]
    [--enable | --disable]
```

Table 49.33. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List flavors according to their name.
--flavorprofile <flavor_profile>	List flavors according to their flavor profile.
--enable	List enabled flavors.
--disable	List disabled flavors.

Table 49.34. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.35. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.36. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.37. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.11. LOADBALANCER FLAVOR SET

Update a flavor

Usage:

```
openstack loadbalancer flavor set [-h] [--name <name>]
                                [--enable | --disable]
                                <flavor>
```

Table 49.38. Positional Arguments

Value	Summary
<flavor>	Name or uuid of the flavor to update.

Table 49.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the name of the flavor.
--enable	Enable flavor.
--disable	Disable flavor.

49.12. LOADBALANCER FLAVOR SHOW

Show the details for a single flavor

Usage:

```
openstack loadbalancer flavor show [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
```

```

[--max-width <integer>]
[--fit-width] [--print-empty]
<flavor>

```

Table 49.40. Positional Arguments

Value	Summary
<flavor>	Name or uuid of the flavor.

Table 49.41. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.42. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.43. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.44. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.45. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.13. LOADBALANCER FLAVORPROFILE CREATE

Create a octavia flavor profile

Usage:

```
openstack loadbalancer flavorprofile create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty] --name
                                         <name> --provider <provider
                                         name> --flavor-data
                                         <flavor_data>
```

Table 49.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New octavia flavor profile name.
--provider <provider name>	Provider name for the flavor profile.
--flavor-data <flavor_data>	The json string containing the flavor metadata.

Table 49.47. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.48. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.49. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.50. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.14. LOADBALANCER FLAVORPROFILE DELETE

Delete a flavor profile

Usage:

```
openstack loadbalancer flavorprofile delete [-h] <flavor_profile>
```

Table 49.51. Positional Arguments

Value	Summary
<flavor_profile>	Flavor profiles to delete (name or id)

Table 49.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

49.15. LOADBALANCER FLAVORPROFILE LIST

List flavor profile

Usage:

```
openstack loadbalancer flavorprofile list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--name <name>]
                                         [--provider <provider_name>]
```

Table 49.53. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List flavor profiles by flavor profile name.
--provider <provider_name>	List flavor profiles according to their provider.

Table 49.54. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.55. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.56. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.57. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.16. LOADBALANCER FLAVORPROFILE SET

Update a flavor profile

Usage:

```
openstack loadbalancer flavorprofile set [-h] [--name <name>]
                                         [--provider <provider_name>]
                                         [--flavor-data <flavor_data>]
                                         <flavor_profile>
```

Table 49.58. Positional Arguments

Value	Summary
<flavor_profile>	Name or uuid of the flavor profile to update.

Table 49.59. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the name of the flavor profile.
--provider <provider_name>	Set the provider of the flavor profile.
--flavor-data <flavor_data>	Set the flavor data of the flavor profile.

49.17. LOADBALANCER FLAVORPROFILE SHOW

Show the details for a single flavor profile

Usage:

```
openstack loadbalancer flavorprofile show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         <flavor_profile>
```

Table 49.60. Positional Arguments

Value	Summary
<flavor_profile>	Name or uuid of the flavor profile to show.

Table 49.61. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.62. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.63. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.64. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.65. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.18. LOADBALANCER HEALTHMONITOR CREATE

Create a health monitor

Usage:

```

openstack loadbalancer healthmonitor create [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN] [--noindent]
                                           [--prefix PREFIX]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty]
                                           [--name <name>] --delay
                                           <delay>
                                           [--domain-name <domain_name>]
                                           [--expected-codes <codes>]
                                           [--http-method
{GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,CONNECT,TRACE}]
                                           [--http-version <http_version>]
                                           --timeout <timeout>
                                           --max-retries <max_retries>
                                           [--url-path <url_path>]
                                           --type
{PING,HTTP,TCP,HTTPS,TLS-HELLO,UDP-CONNECT}
                                           [--max-retries-down <max_retries_down>]
                                           [--enable | --disable]
                                           <pool>

```

Table 49.66. Positional Arguments

Value	Summary
<code><pool></code>	Set the pool for the health monitor (name or id).

Table 49.67. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the health monitor name.
--delay <delay>	Set the time in seconds, between sending probes to members.
--domain-name <domain_name>	Set the domain name, which be injected into the http Host Header to the backend server for HTTP health check.
--expected-codes <codes>	Set the list of http status codes expected in response from the member to declare it healthy.
--http-method {GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,C ONNECT,TRACE}	Set the http method that the health monitor uses for requests.
--http-version <http_version>	Set the http version.
--timeout <timeout>	Set the maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
--max-retries <max_retries>	The number of successful checks before changing the operating status of the member to ONLINE.
--url-path <url_path>	Set the http url path of the request sent by the monitor to test the health of a backend member.
--type {PING,HTTP,TCP,HTTPS,TLS-HELLO,UDP- CONNECT}	Set the health monitor type.
--max-retries-down <max_retries_down>	Set the number of allowed check failures before changing the operating status of the member to ERROR.
--enable	Enable health monitor (default).
--disable	Disable health monitor.

Table 49.68. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.69. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.70. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.71. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.19. LOADBALANCER HEALTHMONITOR DELETE

Delete a health monitor

Usage:

```
openstack loadbalancer healthmonitor delete [-h] <health_monitor>
```

Table 49.72. Positional Arguments

Value	Summary
<health_monitor>	Health monitor to delete (name or id).

Table 49.73. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

49.20. LOADBALANCER HEALTHMONITOR LIST

List health monitors

Usage:

```

openstack loadbalancer healthmonitor list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]

```

Table 49.74. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.75. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.76. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.77. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.78. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.21. LOADBALANCER HEALTHMONITOR SET

Update a health monitor

Usage:

```
openstack loadbalancer healthmonitor set [-h] [--name <name>]
                                     [--delay <delay>]
                                     [--domain-name <domain_name>]
                                     [--expected-codes <codes>]
                                     [--http-method
{GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,CONNECT,TRACE}]
                                     [--http-version <http_version>]
                                     [--timeout <timeout>]
                                     [--max-retries <max_retries>]
                                     [--max-retries-down <max_retries_down>]
                                     [--url-path <url_path>]
                                     [--enable | --disable]
                                     <health_monitor>
```

Table 49.79. Positional Arguments

Value	Summary
<health_monitor>	Health monitor to update (name or id).

Table 49.80. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set health monitor name.
--delay <delay>	Set the time in seconds, between sending probes to members.
--domain-name <domain_name>	Set the domain name, which be injected into the http Host Header to the backend server for HTTP health check.
--expected-codes <codes>	Set the list of http status codes expected in response from the member to declare it healthy.
--http-method {GET,POST,DELETE,PUT,HEAD,OPTIONS,PATCH,C ONNECT,TRACE}	Set the http method that the health monitor uses for requests.
--http-version <http_version>	Set the http version.
--timeout <timeout>	Set the maximum time, in seconds, that a monitor waits to connect before it times out. This value must be less than the delay value.
--max-retries <max_retries>	Set the number of successful checks before changing the operating status of the member to ONLINE.
--max-retries-down <max_retries_down>	Set the number of allowed check failures before changing the operating status of the member to ERROR.
--url-path <url_path>	Set the http url path of the request sent by the monitor to test the health of a backend member.
--enable	Enable health monitor.
--disable	Disable health monitor.

49.22. LOADBALANCER HEALTHMONITOR SHOW

Show the details of a single health monitor

Usage:

```
openstack loadbalancer healthmonitor show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         <health_monitor>
```

Table 49.81. Positional Arguments

Value	Summary
<health_monitor>	Name or uuid of the health monitor.

Table 49.82. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.83. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.84. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.85. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.86. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.23. LOADBALANCER L7POLICY CREATE

Create a l7policy

Usage:

```

openstack loadbalancer l7policy create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--name <name>]
    [--description <description>]
    --action

{REDIRECT_TO_URL,REDIRECT_TO_POOL,REDIRECT_PREFIX,REJECT}
    [--redirect-pool <pool> | --redirect-url <url> | --redirect-prefix <url>]
    [--redirect-http-code <redirect_http_code>]
    [--position <position>]
    [--enable | --disable]
    <listener>

```

Table 49.87. Positional Arguments

Value	Summary
<code><listener></code>	Listener to add l7policy to (name or id).

Table 49.88. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Set the l7policy name.

Value	Summary
--description <description>	Set l7policy description.
--action {REDIRECT_TO_URL,REDIRECT_TO_POOL,REDIRECT_PREFIX,REJECT}	Set the action of the policy.
--redirect-pool <pool>	Set the pool to redirect requests to (name or id).
--redirect-url <url>	Set the url to redirect requests to.
--redirect-prefix <url>	Set the url prefix to redirect requests to.
--redirect-http-code <redirect_http_code>	Set the http response code for redirect_url or REDIRECT_PREFIX action.
--position <position>	Sequence number of this l7 policy.
--enable	Enable l7policy (default).
--disable	Disable l7policy.

Table 49.89. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.90. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.91. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.92. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.24. LOADBALANCER L7POLICY DELETE

Delete a l7policy

Usage:

```
openstack loadbalancer l7policy delete [-h] <policy>
```

Table 49.93. Positional Arguments

Value	Summary
<code><policy></code>	L7policy to delete (name or id).

Table 49.94. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

49.25. LOADBALANCER L7POLICY LIST

List l7policies

Usage:

```
openstack loadbalancer l7policy list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
```

Table 49.95. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.96. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.97. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.98. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.99. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.26. LOADBALANCER L7POLICY SET

Update a l7policy

Usage:

```
openstack loadbalancer l7policy set [-h] [--name <name>]
                                     [--description <description>]
                                     [--action
                                     {REDIRECT_TO_URL,REDIRECT_TO_POOL,REDIRECT_PREFIX,REJECT}]
                                     [--redirect-pool <pool> | --redirect-url <url> | --redirect-prefix <url>]
                                     [--redirect-http-code <redirect_http_code>]
                                     [--position <position>]
                                     [--enable | --disable]
                                     <policy>
```

Table 49.100. Positional Arguments

Value	Summary
<policy>	L7policy to update (name or id).

Table 49.101. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set l7policy name.
--description <description>	Set l7policy description.
--action {REDIRECT_TO_URL,REDIRECT_TO_POOL,REDIRECT_PREFIX,REJECT}	Set the action of the policy.
--redirect-pool <pool>	Set the pool to redirect requests to (name or id).
--redirect-url <url>	Set the url to redirect requests to.
--redirect-prefix <url>	Set the url prefix to redirect requests to.
--redirect-http-code <redirect_http_code>	Set the http response code for redirect_url or REDIRECT_PREFIX action.
--position <position>	Set sequence number of this l7 policy.
--enable	Enable l7policy.
--disable	Disable l7policy.

49.27. LOADBALANCER L7POLICY SHOW

Show the details of a single l7policy

Usage:

```
openstack loadbalancer l7policy show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <policy>
```

Table 49.102. Positional Arguments

Value	Summary
<policy>	Name or uuid of the l7policy.

Table 49.103. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.104. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.105. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.106. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.107. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.28. LOADBALANCER L7RULE CREATE

Create a l7rule

Usage:

```

openstack loadbalancer l7rule create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     --compare-type
                                     {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,STARTS_WITH}
                                     [--invert] --value <value>
                                     [--key <key>] --type
                                     {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER,SSL_CONN_HAS_CERT,SSL_VERIFY_RESULT,SSL_DN_FIELD}
                                     [--enable | --disable]
                                     <l7policy>

```

Table 49.108. Positional Arguments

Value	Summary
<code><l7policy></code>	L7policy to add l7rule to (name or id).

Table 49.109. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
--compare-type {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,START S_WITH}	Set the compare type for the l7rule.
--invert	Invert l7rule.
--value <value>	Set the rule value to match on.
--key <key>	Set the key for the l7rule's value to match on.
--type {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER,S SL_CONN_HAS_CERT,SSL_VERIFY_RESULT,SSL_D N_FIELD}	Set the type for the l7rule.
--enable	Enable l7rule (default).
--disable	Disable l7rule.

Table 49.110. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.111. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.112. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.113. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.29. LOADBALANCER L7RULE DELETE

Delete a l7rule

Usage:

```
openstack loadbalancer l7rule delete [-h] <l7policy> <rule_id>
```

Table 49.114. Positional Arguments

Value	Summary
<code><l7policy></code>	L7policy to delete rule from (name or id).
<code><rule_id></code>	L7rule to delete.

Table 49.115. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

49.30. LOADBALANCER L7RULE LIST

List l7rules for l7policy

Usage:

```
openstack loadbalancer l7rule list [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    <l7policy>
```

Table 49.116. Positional Arguments

Value	Summary
<l7policy>	L7policy to list rules for (name or id).

Table 49.117. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.118. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.119. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.120. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.121. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.31. LOADBALANCER L7RULE SET

Update a l7rule

Usage:

```

openstack loadbalancer l7rule set [-h]
                                [--compare-type
                                {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,STARTS_WITH}]
                                [--invert] [--value <value>]
                                [--key <key>]
                                [--type
                                {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER,SSL_CONN_HAS_CERT,SSL_VERIFY_RESULT,SSL_DN_FIELD}]
                                [--enable | --disable]
                                <l7policy> <l7rule_id>

```

Table 49.122. Positional Arguments

Value	Summary
<l7policy>	L7policy to update l7rule on (name or id).
<l7rule_id>	L7rule to update.

Table 49.123. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--compare-type {REGEX,EQUAL_TO,CONTAINS,ENDS_WITH,STARTS_WITH}	Set the compare type for the l7rule.
--invert	Invert l7rule.
--value <value>	Set the rule value to match on.

Value	Summary
--key <key>	Set the key for the l7rule's value to match on.
--type {FILE_TYPE,PATH,COOKIE,HOST_NAME,HEADER,SSL_CONN_HAS_CERT,SSL_VERIFY_RESULT,SSL_DN_FIELD}	Set the type for the l7rule.
--enable	Enable l7rule.
--disable	Disable l7rule.

49.32. LOADBALANCER L7RULE SHOW

Show the details of a single l7rule

Usage:

```
openstack loadbalancer l7rule show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                <l7policy> <l7rule_id>
```

Table 49.124. Positional Arguments

Value	Summary
<l7policy>	L7policy to show rule from (name or id).
<l7rule_id>	L7rule to show.

Table 49.125. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.126. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.127. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.128. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.129. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.33. LOADBALANCER LIST

List load balancers

Usage:

```

openstack loadbalancer list [-h] [-f {csv,json,table,value,yaml}]
                           [-c COLUMN]
                           [--quote {all,minimal,none,nonnumeric}]
                           [--noindent] [--max-width <integer>]
                           [--fit-width] [--print-empty]
                           [--sort-column SORT_COLUMN] [--name <name>]
                           [--enable | --disable]
                           [--project <project-id>]
                           [--vip-network-id <vip_network_id>]
                           [--vip-subnet-id <vip_subnet_id>]
                           [--vip-qos-policy-id <vip_qos_policy_id>]

```



```

[--vip-port-id <vip_port_id>]
[--provisioning-status
{ACTIVE,DELETED,ERROR,PENDING_CREATE,PENDING_UPDATE,PENDING_DELETE}]
[--operating-status
{ONLINE,DRAINING,OFFLINE,DEGRADED,ERROR,NO_MONITOR}]
[--provider <provider>] [--flavor <flavor>]

```

Table 49.130. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List load balancers according to their name.
--enable	List enabled load balancers.
--disable	List disabled load balancers.
--project <project-id>	List load balancers according to their project (name or ID).
--vip-network-id <vip_network_id>	List load balancers according to their vip network (name or ID).
--vip-subnet-id <vip_subnet_id>	List load balancers according to their vip subnet (name or ID).
--vip-qos-policy-id <vip_qos_policy_id>	List load balancers according to their vip qos policy (name or ID).
--vip-port-id <vip_port_id>	List load balancers according to their vip port (name or ID).
--provisioning-status {ACTIVE,DELETED,ERROR,PENDING_CREATE,PENDING_UPDATE,PENDING_DELETE}	List load balancers according to their provisioning status.
--operating-status {ONLINE,DRAINING,OFFLINE,DEGRADED,ERROR,NO_MONITOR}	List load balancers according to their operating status.
--provider <provider>	List load balancers according to their provider.
--flavor <flavor>	List load balancers according to their flavor.

Table 49.131. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.132. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.133. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.134. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.34. LOADBALANCER LISTENER CREATE

Create a listener

Usage:

```
openstack loadbalancer listener create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
```

```

[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--name <name>]
[--description <description>]
--protocol
{TCP,HTTP,HTTPS,TERMINATED_HTTPS,UDP}
[--connection-limit <limit>]
[--default-pool <pool>]
[--default-tls-container-ref <container_ref>]
[--sni-container-refs [<container_ref> [<container_ref> ...]]]
[--insert-headers <header=value,...>]
--protocol-port <port>
[--timeout-client-data <timeout>]
[--timeout-member-connect <timeout>]
[--timeout-member-data <timeout>]
[--timeout-tcp-inspect <timeout>]
[--enable | --disable]
[--client-ca-tls-container-ref <container_ref>]
[--client-authentication {NONE,OPTIONAL,MANDATORY}]
[--client-crl-container-ref <client_crl_container_ref>]
<loadbalancer>

```

Table 49.135. Positional Arguments

Value	Summary
<loadbalancer>	Load balancer for the listener (name or id).

Table 49.136. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the listener name.
--description <description>	Set the description of this listener.
--protocol {TCP,HTTP,HTTPS,TERMINATED_HTTPS,UDP}	The protocol for the listener.
--connection-limit <limit>	Set the maximum number of connections permitted for this listener.
--default-pool <pool>	Set the name or id of the pool used by the listener if no L7 policies match.
--default-tls-container-ref <container_ref>	The uri to the key manager service secrets container containing the certificate and key for TERMINATED_TLS listeners.

Value	Summary
<code>--sni-container-refs [<container_ref> [<container_ref> ...]]</code>	A list of uris to the key manager service secrets containers containing the certificates and keys for TERMINATED_TLS the listener using Server Name Indication.
<code>--insert-headers <header=value,...></code>	A dictionary of optional headers to insert into the request before it is sent to the backend member.
<code>--protocol-port <port></code>	Set the protocol port number for the listener.
<code>--timeout-client-data <timeout></code>	Frontend client inactivity timeout in milliseconds. Default: 50000.
<code>--timeout-member-connect <timeout></code>	Backend member connection timeout in milliseconds. Default: 5000.
<code>--timeout-member-data <timeout></code>	Backend member inactivity timeout in milliseconds. Default: 50000.
<code>--timeout-tcp-inspect <timeout></code>	Time, in milliseconds, to wait for additional tcp packets for content inspection. Default: 0.
<code>--enable</code>	Enable listener (default).
<code>--disable</code>	Disable listener.
<code>--client-ca-tls-container-ref <container_ref></code>	The uri to the key manager service secrets container containing the CA certificate for TERMINATED_TLS listeners.
<code>--client-authentication {NONE,OPTIONAL,MANDATORY}</code>	The tls client authentication verify options for TERMINATED_TLS listeners.
<code>--client-crl-container-ref <client_crl_container_ref></code>	The uri to the key manager service secrets container containing the CA revocation list file for TERMINATED_TLS listeners.

Table 49.137. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 49.138. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.139. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 49.140. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.35. LOADBALANCER LISTENER DELETE

Delete a listener

Usage:

```
openstack loadbalancer listener delete [-h] <listener>
```

Table 49.141. Positional Arguments

Value	Summary
<code><listener></code>	Listener to delete (name or id)

Table 49.142. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

49.36. LOADBALANCER LISTENER LIST

List listeners

Usage:

```
openstack loadbalancer listener list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--name <name>]
                                     [--loadbalancer <loadbalancer>]
                                     [--enable | --disable]
                                     [--project <project>]
```

Table 49.143. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	List listeners by listener name.
--loadbalancer <loadbalancer>	Filter by load balancer (name or id).
--enable	List enabled listeners.
--disable	List disabled listeners.
--project <project>	List listeners by project id.

Table 49.144. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.145. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.146. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.147. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.37. LOADBALANCER LISTENER SET

Update a listener

Usage:

```
openstack loadbalancer listener set [-h] [--name <name>]
    [--description <description>]
    [--connection-limit <limit>]
    [--default-pool <pool>]
    [--default-tls-container-ref <container-ref>]
    [--sni-container-refs [<container-ref> [<container-ref> ...]]]
    [--insert-headers <header=value>]
    [--timeout-client-data <timeout>]
    [--timeout-member-connect <timeout>]
    [--timeout-member-data <timeout>]
    [--timeout-tcp-inspect <timeout>]
    [--enable | --disable]
    [--client-ca-tls-container-ref <container_ref>]
    [--client-authentication {NONE,OPTIONAL,MANDATORY}]
    [--client-crl-container-ref <client_crl_container_ref>]
    <listener>
```

Table 49.148. Positional Arguments

Value	Summary
<listener>	Listener to modify (name or id).

Table 49.149. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the listener name.
--description <description>	Set the description of this listener.
--connection-limit <limit>	The maximum number of connections permitted for this listener. Default value is -1 which represents infinite connections.
--default-pool <pool>	The id of the pool used by the listener if no l7 policies match.
--default-tls-container-ref <container-ref>	The uri to the key manager service secrets container containing the certificate and key for TERMINATED_TLSlisteners.
--sni-container-refs [<container-ref> [<container-ref> ...]]	A list of uris to the key manager service secrets containers containing the certificates and keys for TERMINATED_TLS the listener using Server Name Indication.
--insert-headers <header=value>	A dictionary of optional headers to insert into the request before it is sent to the backend member.
--timeout-client-data <timeout>	Frontend client inactivity timeout in milliseconds. Default: 50000.
--timeout-member-connect <timeout>	Backend member connection timeout in milliseconds. Default: 5000.
--timeout-member-data <timeout>	Backend member inactivity timeout in milliseconds. Default: 50000.
--timeout-tcp-inspect <timeout>	Time, in milliseconds, to wait for additional tcp packets for content inspection. Default: 0.
--enable	Enable listener.
--disable	Disable listener.

Value	Summary
<code>--client-ca-tls-container-ref <container_ref></code>	The uri to the key manager service secrets container containing the CA certificate for TERMINATED_TLS listeners.
<code>--client-authentication</code> <code>{NONE,OPTIONAL,MANDATORY}</code>	The tls client authentication verify options for TERMINATED_TLS listeners.
<code>--client-crl-container-ref <client_crl_container_ref></code>	The uri to the key manager service secrets container containing the CA revocation list file for TERMINATED_TLS listeners.

49.38. LOADBALANCER LISTENER SHOW

Show the details of a single listener

Usage:

```
openstack loadbalancer listener show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <listener>
```

Table 49.150. Positional Arguments

Value	Summary
<code><listener></code>	Name or uuid of the listener

Table 49.151. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 49.152. Output Formatters

Value	Summary
<code>output formatter options-f</code> <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 49.153. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.154. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.155. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.39. LOADBALANCER LISTENER STATS SHOW

Shows the current statistics for a listener.

Usage:

```

openstack loadbalancer listener stats show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         <listener>

```

Table 49.156. Positional Arguments

Value	Summary
<listener>	Name or uuid of the listener

Table 49.157. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.158. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.159. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.160. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.161. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.40. LOADBALANCER MEMBER CREATE

Creating a member in a pool

Usage:

```

openstack loadbalancer member create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--name <name>]
                                     [--disable-backup | --enable-backup]
                                     [--weight <weight>] --address
                                     <ip_address>
                                     [--subnet-id <subnet_id>]
                                     --protocol-port <protocol_port>
                                     [--monitor-port <monitor_port>]
                                     [--monitor-address <monitor_address>]
                                     [--enable | --disable]
                                     <pool>

```

Table 49.162. Positional Arguments

Value	Summary
<pool>	Id or name of the pool to create the member for.

Table 49.163. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the member.
--disable-backup	Disable member backup (default)
--enable-backup	Enable member backup
--weight <weight>	The weight of a member determines the portion of requests or connections it services compared to the other members of the pool.
--address <ip_address>	The ip address of the backend member server
--subnet-id <subnet_id>	The subnet id the member service is accessible from.
--protocol-port <protocol_port>	The protocol port number the backend member server is listening on.
--monitor-port <monitor_port>	An alternate protocol port used for health monitoring a backend member.

Value	Summary
<code>--monitor-address <monitor_address></code>	An alternate ip address used for health monitoring a backend member.
<code>--enable</code>	Enable member (default)
<code>--disable</code>	Disable member

Table 49.164. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 49.165. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.166. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 49.167. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.41. LOADBALANCER MEMBER DELETE

Delete a member from a pool

Usage:

```
openstack loadbalancer member delete [-h] <pool> <member>
```

Table 49.168. Positional Arguments

Value	Summary
<pool>	Pool name or id to delete the member from.
<member>	Name or id of the member to be deleted.

Table 49.169. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

49.42. LOADBALANCER MEMBER LIST

List members in a pool

Usage:

```
openstack loadbalancer member list [-h]
                                  [-f {csv,json,table,value,yaml}]
                                  [-c COLUMN]
                                  [--quote {all,minimal,none,nonnumeric}]
                                  [--noindent] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--sort-column SORT_COLUMN]
                                  <pool>
```

Table 49.170. Positional Arguments

Value	Summary
<pool>	Pool name or id to list the members of.

Table 49.171. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.172. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.173. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.174. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.175. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.43. LOADBALANCER MEMBER SET

Update a member

Usage:

```
openstack loadbalancer member set [-h] [--name <name>]
                                [--disable-backup | --enable-backup]
```

```

[--weight <weight>]
[--monitor-port <monitor_port>]
[--monitor-address <monitor_address>]
[--enable | --disable]
<pool> <member>

```

Table 49.176. Positional Arguments

Value	Summary
<pool>	Pool that the member to update belongs to (name or ID).
<member>	Name or id of the member to update

Table 49.177. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set the name of the member
--disable-backup	Disable member backup (default)
--enable-backup	Enable member backup
--weight <weight>	Set the weight of member in the pool
--monitor-port <monitor_port>	An alternate protocol port used for health monitoring a backend member
--monitor-address <monitor_address>	An alternate ip address used for health monitoring a backend member.
--enable	Set the admin_state_up to true
--disable	Set the admin_state_up to false

49.44. LOADBALANCER MEMBER SHOW

Shows details of a single Member

Usage:

```

openstack loadbalancer member show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]

```



```

[--max-width <integer>]
[--fit-width] [--print-empty]
<pool> <member>

```

Table 49.178. Positional Arguments

Value	Summary
<pool>	Pool name or id to show the members of.
<member>	Name or id of the member to show.

Table 49.179. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.180. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.181. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.182. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.183. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.45. LOADBALANCER POOL CREATE

Create a pool

Usage:

```

openstack loadbalancer pool create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--name <name>]
    [--description <description>]
    --protocol
    {TCP,HTTP,HTTPS,TERMINATED_HTTPS,PROXY,UDP}
    (--listener <listener> | --loadbalancer <load_balancer>)
    [--session-persistence <session persistence>]
    --lb-algorithm
    {SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS}
    [--enable | --disable]
    [--tls-container-ref <container-ref>]
    [--ca-tls-container-ref <ca_tls_container_ref>]
    [--crl-container-ref <crl_container_ref>]
    [--enable-tls | --disable-tls]

```

Table 49.184. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Set pool name.
<code>--description <description></code>	Set pool description.

Value	Summary
--protocol {TCP,HTTP,HTTPS,TERMINATED_HTTPS,PROXY,UDP}	Set the pool protocol.
--listener <listener>	Listener to add the pool to (name or id).
--loadbalancer <load_balancer>	Load balancer to add the pool to (name or id)
--session-persistence <session persistence>	Set the session persistence for the listener (key=value).
--lb-algorithm {SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS}	Load balancing algorithm to use.
--enable	Enable pool (default).
--disable	Disable pool.
--tls-container-ref <container-ref>	The reference to the key manager service secrets container containing the certificate and key for ``tls_enabled`` pools to re-encrypt the traffic to backend member servers.
--ca-tls-container-ref <ca_tls_container_ref>	The reference to the key manager service secrets container containing the CA certificate for ``tls_enabled`` pools to check the backend member servers certificates
--crl-container-ref <crl_container_ref>	The reference to the key manager service secrets container containing the CA revocation list file for ``tls_enabled`` pools to validate the backend member servers certificates.
--enable-tls	Enable backend member re-encryption.
--disable-tls	Disable backend member re-encryption.

Table 49.185. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.186. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.187. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 49.188. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.46. LOADBALANCER POOL DELETE

Delete a pool

Usage:

```
openstack loadbalancer pool delete [-h] <pool>
```

Table 49.189. Positional Arguments

Value	Summary
<code><pool></code>	Pool to delete (name or id).

Table 49.190. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

49.47. LOADBALANCER POOL LIST

List pools

Usage:

```
openstack loadbalancer pool list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--loadbalancer <loadbalancer>]
```

Table 49.191. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--loadbalancer <loadbalancer>	Filter by load balancer (name or id).

Table 49.192. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.193. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.194. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.195. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.48. LOADBALANCER POOL SET

Update a pool

Usage:

```
openstack loadbalancer pool set [-h] [--name <name>]
                               [--description <description>]
                               [--session-persistence <session_persistence>]
                               [--lb-algorithm {SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS}]
                               [--enable | --disable]
                               [--tls-container-ref <container-ref>]
                               [--ca-tls-container-ref <ca_tls_container_ref>]
                               [--crl-container-ref <crl_container_ref>]
                               [--enable-tls | --disable-tls]
                               <pool>
```

Table 49.196. Positional Arguments

Value	Summary
<code><pool></code>	Pool to update (name or id).

Table 49.197. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Set the name of the pool.
<code>--description <description></code>	Set the description of the pool.
<code>--session-persistence <session_persistence></code>	Set the session persistence for the listener (key=value).

Value	Summary
<code>--lb-algorithm</code> {SOURCE_IP,ROUND_ROBIN,LEAST_CONNECTIONS}	Set the load balancing algorithm to use.
<code>--enable</code>	Enable pool.
<code>--disable</code>	Disable pool.
<code>--tls-container-ref <container-ref></code>	The uri to the key manager service secrets container containing the certificate and key for TERMINATED_TLS pools to re-encrypt the traffic from TERMINATED_TLS listener to backend servers.
<code>--ca-tls-container-ref <ca_tls_container_ref></code>	The uri to the key manager service secrets container containing the CA certificate for TERMINATED_TLS listeners to check the backend servers certificates in ssl traffic.
<code>--crl-container-ref <crl_container_ref></code>	The uri to the key manager service secrets container containing the CA revocation list file for TERMINATED_TLS listeners to validate the backend servers certificates in ssl traffic.
<code>--enable-tls</code>	Enable backend associated members re-encryption.
<code>--disable-tls</code>	Disable backend associated members re-encryption.

49.49. LOADBALANCER POOL SHOW

Show the details of a single pool

Usage:

```
openstack loadbalancer pool show [-h]
                               [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <pool>
```

Table 49.198. Positional Arguments

Value	Summary
<code><pool></code>	Name or uuid of the pool.

Table 49.199. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.200. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.201. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.202. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.203. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.50. LOADBALANCER PROVIDER CAPABILITY LIST

List specified provider driver's flavor capabilities.

Usage:

```

openstack loadbalancer provider capability list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         <provider_name>

```

Table 49.204. Positional Arguments

Value	Summary
<provider_name>	Name of the provider driver.

Table 49.205. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.206. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.207. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.208. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.209. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.51. LOADBALANCER PROVIDER LIST

List all providers

Usage:

```

openstack loadbalancer provider list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]

```

Table 49.210. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.211. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.212. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 49.213. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 49.214. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.52. LOADBALANCER QUOTA DEFAULTS SHOW

Show quota defaults

Usage:

```
openstack loadbalancer quota defaults show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
```

Table 49.215. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.216. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.217. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.218. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.219. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.53. LOADBALANCER QUOTA LIST

List quotas

Usage:

■

```

openstack loadbalancer quota list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--project <project-id>]

```

Table 49.220. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project-id>	Name or uuid of the project.

Table 49.221. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 49.222. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 49.223. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.224. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.54. LOADBALANCER QUOTA RESET

Resets quotas to default quotas

Usage:

```
openstack loadbalancer quota reset [-h] <project>
```

Table 49.225. Positional Arguments

Value	Summary
<code><project></code>	Project to reset quotas (name or id)

Table 49.226. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

49.55. LOADBALANCER QUOTA SET

Update a quota

Usage:

```
openstack loadbalancer quota set [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty]
    [--healthmonitor <health_monitor>]
    [--listener <listener>]
```

```

[--loadbalancer <load_balancer>]
[--member <member>] [--pool <pool>]
<project>

```

Table 49.227. Positional Arguments

Value	Summary
<project>	Name or uuid of the project.

Table 49.228. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.229. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.230. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.231. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.232. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

Table 49.233. Quota limits

Value	Summary
At least one of the following arguments is required.--healthmonitor <health_monitor>	New value for the health monitor quota. value -1 means unlimited.
--listener <listener>	New value for the listener quota. value -1 means unlimited.
--loadbalancer <load_balancer>	New value for the load balancer quota limit. value -1 means unlimited.
--member <member>	New value for the member quota limit. value -1 means unlimited.
--pool <pool>	New value for the pool quota limit. value -1 means unlimited.

49.56. LOADBALANCER QUOTA SHOW

Show the quota details for a project

Usage:

```
openstack loadbalancer quota show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <project>
```

Table 49.234. Positional Arguments

Value	Summary
<project>	Name or uuid of the project.

Table 49.235. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.236. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.237. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.238. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.239. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.57. LOADBALANCER SET

Update a load balancer

Usage:

■

```

openstack loadbalancer set [-h] [--name <name>]
                        [--description <description>]
                        [--vip-qos-policy-id <vip_qos_policy_id>]
                        [--enable | --disable]
                        <load_balancer>

```

Table 49.240. Positional Arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer to update.

Table 49.241. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set load balancer name.
--description <description>	Set load balancer description.
--vip-qos-policy-id <vip_qos_policy_id>	Set qos policy id for vip port. unset with <i>none</i> .
--enable	Enable load balancer.
--disable	Disable load balancer.

49.58. LOADBALANCER SHOW

Show the details for a single load balancer

Usage:

```

openstack loadbalancer show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <load_balancer>

```

Table 49.242. Positional Arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer.

Table 49.243. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.244. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.245. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.246. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.247. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

49.59. LOADBALANCER STATS SHOW

Shows the current statistics for a load balancer

Usage:

■

```

openstack loadbalancer stats show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <load_balancer>

```

Table 49.248. Positional Arguments

Value	Summary
<load_balancer>	Name or uuid of the load balancer.

Table 49.249. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 49.250. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 49.251. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 49.252. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 49.253. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

49.60. LOADBALANCER STATUS SHOW

Display load balancer status tree in json format

Usage:

```
openstack loadbalancer status show [-h] <load_balancer>
```

Table 49.254. Positional Arguments

Value	Summary
<code><load_balancer></code>	Name or uuid of the load balancer.

Table 49.255. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

CHAPTER 50. MAPPING

This chapter describes the commands under the **mapping** command.

50.1. MAPPING CREATE

Create new mapping

Usage:

```
openstack mapping create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] --rules <filename>
                        <name>
```

Table 50.1. Positional Arguments

Value	Summary
<name>	New mapping name (must be unique)

Table 50.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--rules <filename>	Filename that contains a set of mapping rules (required)

Table 50.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 50.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 50.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 50.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

50.2. MAPPING DELETE

Delete mapping(s)

Usage:

```
openstack mapping delete [-h] <mapping> [<mapping> ...]
```

Table 50.7. Positional Arguments

Value	Summary
<mapping>	Mapping(s) to delete

Table 50.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

50.3. MAPPING LIST

List mappings

Usage:

```
openstack mapping list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]

```

Table 50.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 50.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 50.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 50.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 50.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

50.4. MAPPING SET

Set mapping properties

Usage:

```
openstack mapping set [-h] [--rules <filename>] <name>
```

Table 50.14. Positional Arguments

Value	Summary
<code><name></code>	Mapping to modify

Table 50.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--rules <filename></code>	Filename that contains a new set of mapping rules

50.5. MAPPING SHOW

Display mapping details

Usage:

```
openstack mapping show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <mapping>
```

Table 50.16. Positional Arguments

Value	Summary
<code><mapping></code>	Mapping to display

Table 50.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 50.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 50.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 50.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 50.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 51. MESSAGING

This chapter describes the commands under the **messaging** command.

51.1. MESSAGING CLAIM CREATE

Create claim and return a list of claimed messages

Usage:

```
openstack messaging claim create [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--ttl <ttl>] [--grace <grace>]
                                [--limit <limit>]
                                <queue_name>
```

Table 51.1. Positional Arguments

Value	Summary
<queue_name>	Name of the queue to be claim

Table 51.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--ttl <ttl>	Time to live in seconds for claim
--grace <grace>	The message grace period in seconds
--limit <limit>	Claims a set of messages, up to limit

Table 51.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 51.4. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 51.5. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

51.2. MESSAGING CLAIM QUERY

Display claim details

Usage:

```
openstack messaging claim query [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               <queue_name> <claim_id>
```

Table 51.7. Positional Arguments

Value	Summary
<queue_name>	Name of the claimed queue
<claim_id>	Id of the claim

Table 51.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.9. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 51.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.11. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.12. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

51.3. MESSAGING CLAIM RELEASE

Delete a claim

Usage:

```
openstack messaging claim release [-h] <queue_name> <claim_id>
```

Table 51.13. Positional Arguments

Value	Summary
<code><queue_name></code>	Name of the claimed queue
<code><claim_id></code>	Claim id to delete

Table 51.14. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

51.4. MESSAGING CLAIM RENEW

Renew a claim

Usage:

```
openstack messaging claim renew [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--ttl <ttl>] [--grace <grace>]
                                <queue_name> <claim_id>
```

Table 51.15. Positional Arguments

Value	Summary
<queue_name>	Name of the claimed queue
<claim_id>	Claim id

Table 51.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--ttl <ttl>	Time to live in seconds for claim
--grace <grace>	The message grace period in seconds

Table 51.17. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 51.18. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.20. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

51.5. MESSAGING FLAVOR CREATE

Create a pool flavor

Usage:

```

openstack messaging flavor create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--capabilities <capabilities>]
                                <flavor_name> <pool_group>

```

Table 51.21. Positional Arguments

Value	Summary
<code><flavor_name></code>	Name of the flavor
<code><pool_group></code>	Pool group for flavor

Table 51.22. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--capabilities <capabilities></code>	Describes flavor-specific capabilities, this option is only available in client api version < 2 .

Table 51.23. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.24. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.25. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.26. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.6. MESSAGING FLAVOR DELETE

Delete a pool flavor

Usage:

```
openstack messaging flavor delete [-h] <flavor_name>
```

Table 51.27. Positional Arguments

Value	Summary
<flavor_name>	Name of the flavor

Table 51.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

51.7. MESSAGING FLAVOR LIST

List available pool flavors

Usage:

```

openstack messaging flavor list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--marker <flavor_name>]
                                [--limit <limit>] [--detailed]

```

Table 51.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker <flavor_name>	Flavor's paging marker
--limit <limit>	Page size limit
--detailed	If show detailed capabilities of flavor

Table 51.30. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 51.31. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 51.32. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.33. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

51.8. MESSAGING FLAVOR SHOW

Display pool flavor details

Usage:

```
openstack messaging flavor show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <flavor_name>
```

Table 51.34. Positional Arguments

Value	Summary
<flavor_name>	Flavor to display (name)

Table 51.35. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.36. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.37. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.38. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.39. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.9. MESSAGING FLAVOR UPDATE

Update a flavor's attributes

Usage:

```
openstack messaging flavor update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--pool_group <pool_group>]
                                [--capabilities <capabilities>]
                                <flavor_name>
```

Table 51.40. Positional Arguments

Value	Summary
<flavor_name>	Name of the flavor

Table 51.41. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--pool_group <pool_group>	Pool group the flavor sits on
--capabilities <capabilities>	Describes flavor-specific capabilities.

Table 51.42. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.43. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.44. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.45. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.10. MESSAGING HEALTH

Display detailed health status of Zaqr server

Usage:

```
openstack messaging health [-h]
```

Table 51.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

51.11. MESSAGING HOMEDOC

Display detailed resource doc of Zaqr server

Usage:

```
openstack messaging homedoc [-h]
```

Table 51.47. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

51.12. MESSAGING MESSAGE LIST

List all messages for a given queue

Usage:

```
openstack messaging message list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--message-ids <message_ids>]
                                [--limit <limit>] [--echo]
                                [--include-claimed]
                                [--include-delayed]
                                [--client-id <client_id>]
                                <queue_name>
```

Table 51.48. Positional Arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.49. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--message-ids <message_ids>	List of messages' ids to retrieve
--limit <limit>	Maximum number of messages to get
--echo	Whether to get this client's own messages
--include-claimed	Whether to include claimed messages
--include-delayed	Whether to include delayed messages
--client-id <client_id>	A uuid for each client instance.

Table 51.50. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 51.51. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.52. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.53. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.13. MESSAGING MESSAGE POST

Post messages for a given queue

Usage:

```
openstack messaging message post [-h] [--client-id <client_id>]
    <queue_name> <messages>
```


Table 51.54. Positional Arguments

Value	Summary
<queue_name>	Name of the queue
<messages>	Messages to be posted.

Table 51.55. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--client-id <client_id>	A uuid for each client instance.

51.14. MESSAGING PING

Check if Zaqr server is alive or not

Usage:

```
openstack messaging ping [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
```

Table 51.56. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.57. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.58. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.59. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 51.60. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

51.15. MESSAGING POOL CREATE

Create a pool

Usage:

```
openstack messaging pool create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--pool_group <pool_group>]
                               [--pool_options <pool_options>]
                               <pool_name> <pool_uri> <pool_weight>
```

Table 51.61. Positional Arguments

Value	Summary
<code><pool_name></code>	Name of the pool
<code><pool_uri></code>	Storage engine uri

Value	Summary
<pool_weight>	Weight of the pool

Table 51.62. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--pool_group <pool_group>	Group of the pool
--pool_options <pool_options>	An optional request component related to storage-specific options

Table 51.63. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.64. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.65. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.66. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.16. MESSAGING POOL DELETE

Delete a pool

Usage:

```
openstack messaging pool delete [-h] <pool_name>
```

Table 51.67. Positional Arguments

Value	Summary
<pool_name>	Name of the pool

Table 51.68. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

51.17. MESSAGING POOL LIST

List available Pools

Usage:

```
openstack messaging pool list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--marker <pool_name>] [--limit <limit>]
                               [--detailed]
```

Table 51.69. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker <pool_name>	Pool's paging marker
--limit <limit>	Page size limit
--detailed	Detailed output

Table 51.70. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 51.71. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.72. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.73. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.18. MESSAGING POOL SHOW

Display pool details

Usage:

```
openstack messaging pool show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             <pool_name>
```

Table 51.74. Positional Arguments

Value	Summary
<pool_name>	Pool to display (name)

Table 51.75. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.76. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.77. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.78. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.79. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.19. MESSAGING POOL UPDATE

Update a pool attribute

Usage:

```
openstack messaging pool update [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--pool_uri <pool_uri>]
                               [--pool_weight <pool_weight>]
                               [--pool_group <pool_group>]
                               [--pool_options <pool_options>]
                               <pool_name>
```

Table 51.80. Positional Arguments

Value	Summary
<pool_name>	Name of the pool

Table 51.81. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--pool_uri <pool_uri></code>	Storage engine uri
<code>--pool_weight <pool_weight></code>	Weight of the pool
<code>--pool_group <pool_group></code>	Group of the pool
<code>--pool_options <pool_options></code>	An optional request component related to storage-specific options

Table 51.82. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 51.83. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.84. Shell Formatter

Value	Summary
a format a UNIX shell can parse (<code>variable="value"</code>)-- prefix PREFIX	Add a prefix to all variable names

Table 51.85. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Value	Summary
--print-empty	Print empty table if there is no data to show.

51.20. MESSAGING QUEUE CREATE

Create a queue

Usage:

```
openstack messaging queue create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <queue_name>
```

Table 51.86. Positional Arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.87. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.88. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.89. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.90. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.91. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.21. MESSAGING QUEUE DELETE

Delete a queue

Usage:

```
openstack messaging queue delete [-h] <queue_name>
```

Table 51.92. Positional Arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.93. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

51.22. MESSAGING QUEUE GET METADATA

Get queue metadata

Usage:

```
openstack messaging queue get metadata [-h]
```

```

[-f {json,shell,table,value,yaml}]
[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
<queue_name>

```

Table 51.94. Positional Arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.95. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 51.96. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.97. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.98. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.99. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

51.23. MESSAGING QUEUE LIST

List available queues

Usage:

```
openstack messaging queue list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--marker <queue_id>] [--limit <limit>]
                               [--detailed]
```

Table 51.100. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--marker <queue_id></code>	Queue's paging marker
<code>--limit <limit></code>	Page size limit
<code>--detailed</code>	If show detailed information of queue

Table 51.101. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 51.102. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 51.103. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 51.104. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

51.24. MESSAGING QUEUE PURGE

Purge a queue

Usage:

```
openstack messaging queue purge [-h]
                               [--resource_types <resource_types>]
                               <queue_name>
```

Table 51.105. Positional Arguments

Value	Summary
<code><queue_name></code>	Name of the queue

Table 51.106. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resource_types <resource_types>	Resource types want to be purged.

51.25. MESSAGING QUEUE SET METADATA

Set queue metadata

Usage:

```
openstack messaging queue set metadata [-h]
                                     <queue_name> <queue_metadata>
```

Table 51.107. Positional Arguments

Value	Summary
<queue_name>	Name of the queue
<queue_metadata>	Queue metadata, all the metadata of the queue will be replaced by queue_metadata

Table 51.108. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

51.26. MESSAGING QUEUE SIGNED URL

Create a pre-signed url

Usage:

```
openstack messaging queue signed url [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--paths <paths>]
                                     [--ttl-seconds <ttl_seconds>]
                                     [--methods <methods>]
                                     <queue_name>
```

Table 51.109. Positional Arguments

Value	Summary
<queue_name>	Name of the queue

Table 51.110. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--paths <paths>	Allowed paths in a comma-separated list. options: messages, subscriptions, claims
--ttl-seconds <ttl_seconds>	Length of time (in seconds) until the signature expires
--methods <methods>	Http methods to allow as a comma-separated list. Options: GET, HEAD, OPTIONS, POST, PUT, DELETE

Table 51.111. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.112. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.113. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.114. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

51.27. MESSAGING QUEUE STATS

Get queue stats

Usage:

```
openstack messaging queue stats [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <queue_name>
```

Table 51.115. Positional Arguments

Value	Summary
<code><queue_name></code>	Name of the queue

Table 51.116. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 51.117. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 51.118. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.119. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.120. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.28. MESSAGING SUBSCRIPTION CREATE

Create a subscription for queue

Usage:

```
openstack messaging subscription create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--options <options>]
                                     <queue_name> <subscriber> <ttl>
```

Table 51.121. Positional Arguments

Value	Summary
<queue_name>	Name of the queue to subscribe to
<subscriber>	Subscriber which will be notified

Value	Summary
<ttl>	Time to live of the subscription in seconds

Table 51.122. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--options <options>	Metadata of the subscription in json format

Table 51.123. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.124. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.125. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.126. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

51.29. MESSAGING SUBSCRIPTION DELETE

Delete a subscription

Usage:

```
openstack messaging subscription delete [-h]
                                     <queue_name> <subscription_id>
```

Table 51.127. Positional Arguments

Value	Summary
<code><queue_name></code>	Name of the queue for the subscription
<code><subscription_id></code>	Id of the subscription

Table 51.128. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

51.30. MESSAGING SUBSCRIPTION LIST

List available subscriptions

Usage:

```
openstack messaging subscription list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--marker <subscription_id>]
                                     [--limit <limit>]
                                     <queue_name>
```

Table 51.129. Positional Arguments

Value	Summary
<queue_name>	Name of the queue to subscribe to

Table 51.130. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker <subscription_id>	Subscription's paging marker, the id of the last subscription of the previous page
--limit <limit>	Page size limit, default value is 20

Table 51.131. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 51.132. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 51.133. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.134. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

51.31. MESSAGING SUBSCRIPTION SHOW

Display subscription details

Usage:

```
openstack messaging subscription show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <queue_name> <subscription_id>
```

Table 51.135. Positional Arguments

Value	Summary
<code><queue_name></code>	Name of the queue to subscribe to
<code><subscription_id></code>	Id of the subscription

Table 51.136. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 51.137. Output Formatters

Value	Summary
-------	---------

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.138. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.139. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.140. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

51.32. MESSAGING SUBSCRIPTION UPDATE

Update a subscription

Usage:

```
openstack messaging subscription update [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--subscriber <subscriber>]
```

```

[--ttl <ttl>]
[--options <options>]
<queue_name> <subscription_id>

```

Table 51.141. Positional Arguments

Value	Summary
<queue_name>	Name of the queue to subscribe to
<subscription_id>	Id of the subscription

Table 51.142. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--subscriber <subscriber>	Subscriber which will be notified
--ttl <ttl>	Time to live of the subscription in seconds
--options <options>	Metadata of the subscription in json format

Table 51.143. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 51.144. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 51.145. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 51.146. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 52. METRIC

This chapter describes the commands under the **metric** command.

52.1. METRIC AGGREGATES

Get measurements of aggregated metrics.

Usage:

```
openstack metric aggregates [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--resource-type RESOURCE_TYPE]
                             [--start START] [--stop STOP]
                             [--granularity GRANULARITY]
                             [--needed-overlap NEEDED_OVERLAP]
                             [--groupby GROUPBY] [--fill FILL]
                             operations [search]
```

Table 52.1. Positional Arguments

Value	Summary
operations	Operations to apply to time series
search	A query to filter resource. the syntax is a combination of attribute, operator and value. For example: <code>id=90d58eea-70d7-4294-a49a-170dcdf44c3c</code> would filter resource with a certain id. More complex queries can be built, e.g.: <code>not (flavor_id!="1" and memory>=24)</code> . Use "" to force data to be interpreted as string. Supported operators are: <code>not</code> , <code>and</code> , <code>∧</code> or <code>∨</code> , <code>>=</code> , <code><=</code> , <code>!=</code> , <code>></code> , <code><</code> , <code>=</code> , <code>==</code> , <code>eq</code> , <code>ne</code> , <code>lt</code> , <code>gt</code> , <code>ge</code> , <code>le</code> , <code>in</code> , <code>like</code> , <code>≠</code> , <code>≥</code> , <code>≤</code> , <code>like</code> , <code>in</code> .

Table 52.2. Optional Arguments

Value	Summary
<code>-h</code> , <code>--help</code>	Show this help message and exit
<code>--resource-type RESOURCE_TYPE</code>	Resource type to query
<code>--start START</code>	Beginning of the period
<code>--stop STOP</code>	End of the period

Value	Summary
<code>--granularity GRANULARITY</code>	Granularity to retrieve
<code>--needed-overlap NEEDED_OVERLAP</code>	Percentage of overlap across datapoints
<code>--groupby GROUPBY</code>	Attribute to use to group resources
<code>--fill FILL</code>	Value to use when backfilling timestamps with missing values in a subset of series. Value should be a float or <i>null</i> .

Table 52.3. Output Formatters

Value	Summary
output formatter options- <code>f</code> {csv,json,table,value,yaml}, <code>--format</code> {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.4. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.5. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.2. METRIC ARCHIVE-POLICY CREATE

Create an archive policy.

Usage:

```
openstack metric archive-policy create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty] -d
                                     <DEFINITION> [-b BACK_WINDOW]
                                     [-m AGGREGATION_METHODS]
                                     name
```

Table 52.7. Positional Arguments

Value	Summary
name	Name of the archive policy

Table 52.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-d <DEFINITION>, --definition <DEFINITION></code>	Two attributes (separated by ,) of an archive policy definition with its name and value separated with a :
<code>-b BACK_WINDOW, --back-window BACK_WINDOW</code>	Back window of the archive policy
<code>-m AGGREGATION_METHODS, --aggregation-method AGGREGATION_METHODS</code>	Aggregation method of the archive policy

Table 52.9. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.10. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.12. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.3. METRIC ARCHIVE-POLICY DELETE

Delete an archive policy.

Usage:

```
openstack metric archive-policy delete [-h] name
```

Table 52.13. Positional Arguments

Value	Summary
name	Name of the archive policy

Table 52.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

52.4. METRIC ARCHIVE-POLICY LIST

List archive policies.

Usage:

```

openstack metric archive-policy list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]

```

Table 52.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.16. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.17. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.18. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.19. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.5. METRIC ARCHIVE-POLICY-RULE CREATE

Create an archive policy rule.

Usage:

```
openstack metric archive-policy-rule create [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN] [--noindent]
                                           [--prefix PREFIX]
                                           [--max-width <integer>]
                                           [--fit-width]
                                           [--print-empty] -a
                                           ARCHIVE_POLICY_NAME -m
                                           METRIC_PATTERN
                                           name
```

Table 52.20. Positional Arguments

Value	Summary
name	Rule name

Table 52.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-a ARCHIVE_POLICY_NAME, --archive-policy-name ARCHIVE_POLICY_NAME	Archive policy name
-m METRIC_PATTERN, --metric-pattern METRIC_PATTERN	Wildcard of metric name to match

Table 52.22. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.25. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.6. METRIC ARCHIVE-POLICY-RULE DELETE

Delete an archive policy rule.

Usage:

```
openstack metric archive-policy-rule delete [-h] name
```

Table 52.26. Positional Arguments

Value	Summary
name	Name of the archive policy rule

Table 52.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

52.7. METRIC ARCHIVE-POLICY-RULE LIST

List archive policy rules.

Usage:

```
openstack metric archive-policy-rule list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
```

Table 52.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.29. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.30. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.31. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.32. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.8. METRIC ARCHIVE-POLICY-RULE SHOW

Show an archive policy rule.

Usage:

```
openstack metric archive-policy-rule show [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         name
```

Table 52.33. Positional Arguments

Value	Summary
name	Name of the archive policy rule

Table 52.34. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.35. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.36. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.37. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.38. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

52.9. METRIC ARCHIVE-POLICY SHOW

Show an archive policy.

Usage:

```
openstack metric archive-policy show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     name
```

Table 52.39. Positional Arguments

Value	Summary
name	Name of the archive policy

Table 52.40. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 52.41. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 52.42. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.43. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.44. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.10. METRIC ARCHIVE-POLICY UPDATE

Update an archive policy.

Usage:

```

openstack metric archive-policy update [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty] -d
                                     <DEFINITION>
                                     name

```

Table 52.45. Positional Arguments

Value	Summary
name	Name of the archive policy

Table 52.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>-d <DEFINITION>, --definition <DEFINITION></code>	Two attributes (separated by ,) of an archive policy definition with its name and value separated with a :

Table 52.47. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 52.48. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.49. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 52.50. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.11. METRIC BENCHMARK MEASURES ADD

Do benchmark testing of adding measurements.

Usage:

```

openstack metric benchmark measures add [-h]
                                         [--resource-id RESOURCE_ID]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--workers WORKERS] --count
                                         COUNT [--batch BATCH]
                                         [--timestamp-start TIMESTAMP_START]
                                         [--timestamp-end TIMESTAMP_END]
                                         [--wait]
                                         metric

```

Table 52.51. Positional Arguments

Value	Summary
metric	Id or name of the metric

Table 52.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
--workers WORKERS, -w WORKERS	Number of workers to use
--count COUNT, -n COUNT	Number of total measures to send
--batch BATCH, -b BATCH	Number of measures to send in each batch
--timestamp-start TIMESTAMP_START, -s TIMESTAMP_START	First timestamp to use
--timestamp-end TIMESTAMP_END, -e TIMESTAMP_END	Last timestamp to use
--wait	Wait for all measures to be processed

Table 52.53. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.54. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.55. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.56. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.12. METRIC BENCHMARK MEASURES SHOW

Do benchmark testing of measurements show.

Usage:

```
openstack metric benchmark measures show [-h]
      [-f {json,shell,table,value,yaml}]
      [-c COLUMN] [--noindent]
      [--prefix PREFIX]
      [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--utc]
[--resource-id RESOURCE_ID]
[--aggregation AGGREGATION]
[--start START] [--stop STOP]
[--granularity GRANULARITY]
[--refresh]
[--resample RESAMPLE]
[--workers WORKERS] --count
COUNT
metric

```

Table 52.57. Positional Arguments

Value	Summary
metric	Id or name of the metric

Table 52.58. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--utc	Return timestamps as utc
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
--aggregation AGGREGATION	Aggregation to retrieve
--start START	Beginning of the period
--stop STOP	End of the period
--granularity GRANULARITY	Granularity to retrieve
--refresh	Force aggregation of all known measures
--resample RESAMPLE	Granularity to resample time-series to (in seconds)
--workers WORKERS, -w WORKERS	Number of workers to use
--count COUNT, -n COUNT	Number of total measures to send

Table 52.59. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.60. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.61. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.62. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.13. METRIC BENCHMARK METRIC CREATE

Do benchmark testing of metric creation.

Usage:

```
openstack metric benchmark metric create [-h]
                                         [--resource-id RESOURCE_ID]
```

```

[-f {json,shell,table,value,yaml}]
[-c COLUMN] [--noindent]
[--prefix PREFIX]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--archive-policy-name ARCHIVE_POLICY_NAME]
[--workers WORKERS] --count
COUNT [--keep]

```

Table 52.63. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME	Name of the archive policy
--workers WORKERS, -w WORKERS	Number of workers to use
--count COUNT, -n COUNT	Number of metrics to create
--keep, -k	Keep created metrics

Table 52.64. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.65. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.66. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")--prefix PREFIX	Add a prefix to all variable names

Table 52.67. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.14. METRIC BENCHMARK METRIC SHOW

Do benchmark testing of metric show.

Usage:

```
openstack metric benchmark metric show [-h] [--resource-id RESOURCE_ID]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--workers WORKERS] --count
                                     COUNT
                                     metric [metric ...]
```

Table 52.68. Positional Arguments

Value	Summary
<code>metric</code>	Id or name of the metrics

Table 52.69. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>--workers WORKERS, -w WORKERS</code>	Number of workers to use
<code>--count COUNT, -n COUNT</code>	Number of metrics to get

Table 52.70. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.71. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.72. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.73. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.15. METRIC CAPABILITIES LIST

List capabilities.

Usage:

```

openstack metric capabilities list [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>]
                                [--fit-width] [--print-empty]

```

Table 52.74. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.75. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.76. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.77. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.78. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.16. METRIC CREATE

Create a metric.

Usage:

```

openstack metric create [-h] [--resource-id RESOURCE_ID]
                        [-f {json,shell,table,value,yaml}] [-c COLUMN]
                        [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        [--archive-policy-name ARCHIVE_POLICY_NAME]
                        [--unit UNIT]
                        [METRIC_NAME]

```

Table 52.79. Positional Arguments

Value	Summary
METRIC_NAME	Name of the metric

Table 52.80. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME	Name of the archive policy
--unit UNIT, -u UNIT	Unit of the metric

Table 52.81. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.82. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.83. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.84. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.17. METRIC DELETE

Delete a metric.

Usage:

```
openstack metric delete [-h] [--resource-id RESOURCE_ID]
metric [metric ...]
```

Table 52.85. Positional Arguments

Value	Summary
metric	Ids or names of the metric

Table 52.86. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource

52.18. METRIC LIST

List metrics.

Usage:

```

openstack metric list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN] [--limit <LIMIT>]
                    [--marker <MARKER>] [--sort <SORT>]

```

Table 52.87. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <LIMIT>	Number of metrics to return (default is server default)
--marker <MARKER>	Last item of the previous listing. return the next results after this value
--sort <SORT>	Sort of metric attribute (example: user_id:desc-nullslast)

Table 52.88. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.89. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 52.90. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.91. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.19. METRIC MEASURES ADD

Add measurements to a metric.

Usage:

```
openstack metric measures add [-h] [--resource-id RESOURCE_ID] -m
                               MEASURE
                               metric
```

Table 52.92. Positional Arguments

Value	Summary
metric	Id or name of the metric

Table 52.93. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource
<code>-m MEASURE, --measure MEASURE</code>	Timestamp and value of a measure separated with a @

52.20. METRIC MEASURES AGGREGATION

Get measurements of aggregated metrics.

Usage:

```
openstack metric measures aggregation [-h]
                                       [-f {csv,json,table,value,yaml}]
```

```

[-c COLUMN]
[--quote {all,minimal,none,nonnumeric}]
[--noindent]
[--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--utc] -m METRIC [METRIC ...]
[--aggregation AGGREGATION]
[--reaggregation REAGGREGATION]
[--start START] [--stop STOP]
[--granularity GRANULARITY]
[--needed-overlap NEEDED_OVERLAP]
[--query QUERY]
[--resource-type RESOURCE_TYPE]
[--groupby GROUPBY] [--refresh]
[--resample RESAMPLE]
[--fill FILL]

```

Table 52.94. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--utc	Return timestamps as utc
-m METRIC [METRIC ...], --metric METRIC [METRIC ...]	Metrics ids or metric name
--aggregation AGGREGATION	Granularity aggregation function to retrieve
--reaggregation REAGGREGATION	Groupby aggregation function to retrieve
--start START	Beginning of the period
--stop STOP	End of the period
--granularity GRANULARITY	Granularity to retrieve
--needed-overlap NEEDED_OVERLAP	Percent of datapoints in each metrics required
--query QUERY	A query to filter resource. the syntax is a combination of attribute, operator and value. For example: id=90d58eea-70d7-4294-a49a-170dcdf44c3c would filter resource with a certain id. More complex queries can be built, e.g.: not (flavor_id!="1" and memory>=24). Use "" to force data to be interpreted as string. Supported operators are: not, and, \wedge or, \vee , >=, <=, !=, >, <, =, ==, eq, ne, lt, gt, ge, le, in, like, ≠, ≥, ≤, like, in.

Value	Summary
<code>--resource-type RESOURCE_TYPE</code>	Resource type to query
<code>--groupby GROUPBY</code>	Attribute to use to group resources
<code>--refresh</code>	Force aggregation of all known measures
<code>--resample RESAMPLE</code>	Granularity to resample time-series to (in seconds)
<code>--fill FILL</code>	Value to use when backfilling timestamps with missing values in a subset of series. Value should be a float or <i>null</i> .

Table 52.95. Output Formatters

Value	Summary
output formatter options- <code>{csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.96. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.97. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.98. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.21. METRIC MEASURES BATCH-METRICS

Usage:

```
openstack metric measures batch-metrics [-h] file
```

Table 52.99. Positional Arguments

Value	Summary
file	File containing measurements to batch or - for stdin (see Gnocchi REST API docs for the format

Table 52.100. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

52.22. METRIC MEASURES BATCH-RESOURCES-METRICS

Usage:

```
openstack metric measures batch-resources-metrics [-h]
                                                    [--create-metrics]
                                                    file
```

Table 52.101. Positional Arguments

Value	Summary
file	File containing measurements to batch or - for stdin (see Gnocchi REST API docs for the format

Table 52.102. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--create-metrics	Create unknown metrics

52.23. METRIC MEASURES SHOW

Get measurements of a metric.

Usage:

```
openstack metric measures show [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN] [--utc]
                               [--resource-id RESOURCE_ID]
                               [--aggregation AGGREGATION]
                               [--start START] [--stop STOP]
                               [--granularity GRANULARITY] [--refresh]
                               [--resample RESAMPLE]
                               metric
```

Table 52.103. Positional Arguments

Value	Summary
metric	Id or name of the metric

Table 52.104. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--utc	Return timestamps as utc
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
--aggregation AGGREGATION	Aggregation to retrieve
--start START	Beginning of the period
--stop STOP	End of the period
--granularity GRANULARITY	Granularity to retrieve

Value	Summary
<code>--refresh</code>	Force aggregation of all known measures
<code>--resample RESAMPLE</code>	Granularity to resample time-series to (in seconds)

Table 52.105. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.106. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.107. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.108. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.24. METRIC METRIC CREATE

Deprecated: Create a metric.

Usage:

```
openstack metric metric create [-h] [--resource-id RESOURCE_ID]
                               [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--archive-policy-name ARCHIVE_POLICY_NAME]
                               [--unit UNIT]
                               [METRIC_NAME]
```

Table 52.109. Positional Arguments

Value	Summary
METRIC_NAME	Name of the metric

Table 52.110. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource
--archive-policy-name ARCHIVE_POLICY_NAME, -a ARCHIVE_POLICY_NAME	Name of the archive policy
--unit UNIT, -u UNIT	Unit of the metric

Table 52.111. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.112. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.113. Shell Formatter

Value	Summary
<code>a</code> format a UNIX shell can parse (variable="value") <code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.114. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.25. METRIC METRIC DELETE

Deprecated: Delete a metric.

Usage:

```
openstack metric metric delete [-h] [--resource-id RESOURCE_ID]
metric [metric ...]
```

Table 52.115. Positional Arguments

Value	Summary
<code>metric</code>	Ids or names of the metric

Table 52.116. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource

52.26. METRIC METRIC LIST

Deprecated: List metrics.

Usage:

```
openstack metric metric list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--limit <LIMIT>] [--marker <MARKER>]
                             [--sort <SORT>]
```

Table 52.117. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--limit <LIMIT></code>	Number of metrics to return (default is server default)
<code>--marker <MARKER></code>	Last item of the previous listing. return the next results after this value
<code>--sort <SORT></code>	Sort of metric attribute (example: user_id:desc-nullslast)

Table 52.118. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.119. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.120. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.121. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.27. METRIC METRIC SHOW

Deprecated: Show a metric.

Usage:

```

openstack metric metric show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             [--resource-id RESOURCE_ID]
                             metric

```

Table 52.122. Positional Arguments

Value	Summary
<code>metric</code>	Id or name of the metric

Table 52.123. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resource-id RESOURCE_ID, -r RESOURCE_ID	Id of the resource

Table 52.124. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.125. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.126. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.127. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.28. METRIC RESOURCE BATCH DELETE

Delete a batch of resources based on attribute values.

Usage:

```

openstack metric resource batch delete [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--type RESOURCE_TYPE]
                                     query

```

Table 52.128. Positional Arguments

Value	Summary
query	A query to filter resource. the syntax is a combination of attribute, operator and value. For example: id=90d58eea-70d7-4294-a49a-170dcd44c3c would filter resource with a certain id. More complex queries can be built, e.g.: not (flavor_id!="1" and memory>=24). Use "" to force data to be interpreted as string. Supported operators are: not, and, \wedge or, \vee , $\gt;$, $\lt;$, $\leq;$, $\geq;$, $\neq;$, eq, ne, lt, gt, ge, le, in, like, $\neq;$, $\geq;$, $\leq;$, like, in.

Table 52.129. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Table 52.130. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.131. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.132. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.133. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.29. METRIC RESOURCE CREATE

Create a resource.

Usage:

```
openstack metric resource create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--type RESOURCE_TYPE]
                                [-a ATTRIBUTE] [-m ADD_METRIC]
                                [-n CREATE_METRIC]
                                resource_id
```

Table 52.134. Positional Arguments

Value	Summary
resource_id	Id of the resource

Table 52.135. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource
-a ATTRIBUTE, --attribute ATTRIBUTE	Name and value of an attribute separated with a :
-m ADD_METRIC, --add-metric ADD_METRIC	Name:id of a metric to add
-n CREATE_METRIC, --create-metric CREATE_METRIC	Name:archive_policy_name of a metric to create

Table 52.136. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.137. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.138. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.139. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

52.30. METRIC RESOURCE DELETE

Delete a resource.

Usage:

```
openstack metric resource delete [-h] resource_id
```

Table 52.140. Positional Arguments

Value	Summary
<code>resource_id</code>	Id of the resource

Table 52.141. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

52.31. METRIC RESOURCE HISTORY

Show the history of a resource.

Usage:

```
openstack metric resource history [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--details] [--limit <LIMIT>]
                                [--marker <MARKER>] [--sort <SORT>]
                                [--type RESOURCE_TYPE]
                                resource_id
```

Table 52.142. Positional Arguments

Value	Summary
<code>resource_id</code>	Id of a resource

Table 52.143. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--details	Show all attributes of generic resources
--limit <LIMIT>	Number of resources to return (default is server default)
--marker <MARKER>	Last item of the previous listing. return the next results after this value
--sort <SORT>	Sort of resource attribute (example: user_id:desc-nullslast)
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Table 52.144. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.145. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 52.146. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.147. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.32. METRIC RESOURCE LIST

List resources.

Usage:

```
openstack metric resource list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN] [--details]
                               [--history] [--limit <LIMIT>]
                               [--marker <MARKER>] [--sort <SORT>]
                               [--type RESOURCE_TYPE]
```

Table 52.148. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--details</code>	Show all attributes of generic resources
<code>--history</code>	Show history of the resources
<code>--limit <LIMIT></code>	Number of resources to return (default is server default)
<code>--marker <MARKER></code>	Last item of the previous listing. return the next results after this value
<code>--sort <SORT></code>	Sort of resource attribute (example: <code>user_id:desc-nullslast</code>)
<code>--type RESOURCE_TYPE, -t RESOURCE_TYPE</code>	Type of resource

Table 52.149. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.150. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 52.151. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.152. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.33. METRIC RESOURCE SEARCH

Search resources with specified query rules.

Usage:

```
openstack metric resource search [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--details] [--history]
[--limit <LIMIT>] [--marker <MARKER>]
[--sort <SORT>] [--type RESOURCE_TYPE]
query

```

Table 52.153. Positional Arguments

Value	Summary
query	A query to filter resource. the syntax is a combination of attribute, operator and value. For example: id=90d58eea-70d7-4294-a49a-170dcdf44c3c would filter resource with a certain id. More complex queries can be built, e.g.: not (flavor_id!="1" and memory>=24). Use "" to force data to be interpreted as string. Supported operators are: not, and, \wedge or, \vee , >=, <=, !=, >, <, =, ==, eq, ne, lt, gt, ge, le, in, like, ≠, ≥, ≤, like, in.

Table 52.154. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--details	Show all attributes of generic resources
--history	Show history of the resources
--limit <LIMIT>	Number of resources to return (default is server default)
--marker <MARKER>	Last item of the previous listing. return the next results after this value
--sort <SORT>	Sort of resource attribute (example: user_id:desc-nullslast)
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Table 52.155. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.156. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 52.157. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.158. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.34. METRIC RESOURCE SHOW

Show a resource.

Usage:

```
openstack metric resource show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
```

```

[--max-width <integer>] [--fit-width]
[--print-empty] [--type RESOURCE_TYPE]
resource_id

```

Table 52.159. Positional Arguments

Value	Summary
resource_id	Id of a resource

Table 52.160. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Table 52.161. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.162. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.163. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.164. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.35. METRIC RESOURCE-TYPE CREATE

Create a resource type.

Usage:

```
openstack metric resource-type create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [-a ATTRIBUTE]
                                     name
```

Table 52.165. Positional Arguments

Value	Summary
name	Name of the resource type

Table 52.166. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-a ATTRIBUTE, --attribute ATTRIBUTE</code>	Attribute definition, <code>attribute_name:attribute_type:attribute_is_required:attribute_type_option_name=attribute_type_option_value:...</code> For example: <code>display_name:string:true:max_length=255</code>

Table 52.167. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.168. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.169. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.170. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.36. METRIC RESOURCE-TYPE DELETE

Delete a resource type.

Usage:

```
openstack metric resource-type delete [-h] name
```

Table 52.171. Positional Arguments

Value	Summary
name	Name of the resource type

Table 52.172. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

52.37. METRIC RESOURCE-TYPE LIST

List resource types.

Usage:

```

openstack metric resource-type list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--noindent]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--sort-column SORT_COLUMN]

```

Table 52.173. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.174. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 52.175. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 52.176. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.177. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.38. METRIC RESOURCE-TYPE SHOW

Show a resource type.

Usage:

```
openstack metric resource-type show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     name
```

Table 52.178. Positional Arguments

Value	Summary
name	Name of the resource type

Table 52.179. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 52.180. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.181. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.182. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.183. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.39. METRIC RESOURCE-TYPE UPDATE

Create a resource type.

Usage:

-

```

openstack metric resource-type update [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [-a ATTRIBUTE]
                                     [-r REMOVE_ATTRIBUTE]
                                     name

```

Table 52.184. Positional Arguments

Value	Summary
name	Name of the resource type

Table 52.185. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-a ATTRIBUTE, --attribute ATTRIBUTE	Attribute definition, attribute_name:attribute_type:attribute_is_required:attribute_type_option_name=attribute_type_option_value:... For example: display_name:string:true:max_length=255
-r REMOVE_ATTRIBUTE, --remove-attribute REMOVE_ATTRIBUTE	Attribute name

Table 52.186. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.187. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.188. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.189. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

52.40. METRIC RESOURCE UPDATE

Update a resource.

Usage:

```

openstack metric resource update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--type RESOURCE_TYPE]
                                [-a ATTRIBUTE] [-m ADD_METRIC]
                                [-n CREATE_METRIC] [-d DELETE_METRIC]
                                resource_id

```

Table 52.190. Positional Arguments

Value	Summary
resource_id	Id of the resource

Table 52.191. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type RESOURCE_TYPE, -t RESOURCE_TYPE	Type of resource

Value	Summary
-a ATTRIBUTE, --attribute ATTRIBUTE	Name and value of an attribute separated with a :
-m ADD_METRIC, --add-metric ADD_METRIC	Name:id of a metric to add
-n CREATE_METRIC, --create-metric CREATE_METRIC	Name:archive_policy_name of a metric to create
-d DELETE_METRIC, --delete-metric DELETE_METRIC	Name of a metric to delete

Table 52.192. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.193. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.194. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.195. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

52.41. METRIC SERVER VERSION

Show the version of Gnocchi server.

Usage:

```
openstack metric server version [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
```

Table 52.196. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 52.197. Output Formatters

Value	Summary
output formatter options- <code>f</code> <code>{json,shell,table,value,yaml}</code> , <code>--format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 52.198. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.199. Shell Formatter

Value	Summary
a format a UNIX shell can parse (<code>variable="value"</code>)-- <code>prefix PREFIX</code>	Add a prefix to all variable names

Table 52.200. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.42. METRIC SHOW

Show a metric.

Usage:

```
openstack metric show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--resource-id RESOURCE_ID]
                    metric
```

Table 52.201. Positional Arguments

Value	Summary
<code>metric</code>	Id or name of the metric

Table 52.202. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--resource-id RESOURCE_ID, -r RESOURCE_ID</code>	Id of the resource

Table 52.203. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 52.204. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 52.205. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

Table 52.206. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

52.43. METRIC STATUS

Show the status of measurements processing.

Usage:

```
openstack metric status [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
```

Table 52.207. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 52.208. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 52.209. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 52.210. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 52.211. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 53. MODULE

This chapter describes the commands under the **module** command.

53.1. MODULE LIST

List module versions

Usage:

```
openstack module list [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--all]
```

Table 53.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Show all modules that have version information

Table 53.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 53.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 53.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 53.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 54. NETWORK

This chapter describes the commands under the **network** command.

54.1. NETWORK AGENT ADD NETWORK

Add network to an agent

Usage:

```
openstack network agent add network [-h] [--dhcp] <agent-id> <network>
```

Table 54.1. Positional Arguments

Value	Summary
<agent-id>	Agent to which a network is added (id only)
<network>	Network to be added to an agent (name or id)

Table 54.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--dhcp	Add network to a dhcp agent

54.2. NETWORK AGENT ADD ROUTER

Add router to an agent

Usage:

```
openstack network agent add router [-h] [--l3] <agent-id> <router>
```

Table 54.3. Positional Arguments

Value	Summary
<agent-id>	Agent to which a router is added (id only)
<router>	Router to be added to an agent (name or id)

Table 54.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--l3	Add router to an l3 agent

54.3. NETWORK AGENT DELETE

Delete network agent(s)

Usage:

```
openstack network agent delete [-h]
                               <network-agent> [<network-agent> ...]
```

Table 54.5. Positional Arguments

Value	Summary
<network-agent>	Network agent(s) to delete (id only)

Table 54.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

54.4. NETWORK AGENT LIST

List network agents

Usage:

```
openstack network agent list [-h] [-f {csv,json,table,value,yaml}]
                              [-c COLUMN]
                              [--quote {all,minimal,none,nonnumeric}]
                              [--noindent] [--max-width <integer>]
                              [--fit-width] [--print-empty]
                              [--sort-column SORT_COLUMN]
                              [--agent-type <agent-type>]
                              [--host <host>]
                              [--network <network> | --router <router>]
                              [--long]
```

Table 54.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--agent-type <agent-type>	List only agents with the specified agent type. the supported agent types are: bgp, dhcp, open-vswitch, linux-bridge, ofa, l3, loadbalancer, metering, metadata, macvtap, nic.
--host <host>	List only agents running on the specified host
--network <network>	List agents hosting a network (name or id)
--router <router>	List agents hosting this router (name or id)
--long	List additional fields in output

Table 54.8. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.9. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.10. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.11. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.5. NETWORK AGENT REMOVE NETWORK

Remove network from an agent.

Usage:

```
openstack network agent remove network [-h] [--dhcp]
    <agent-id> <network>
```

Table 54.12. Positional Arguments

Value	Summary
<code><agent-id></code>	Agent to which a network is removed (id only)
<code><network></code>	Network to be removed from an agent (name or id)

Table 54.13. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--dhcp</code>	Remove network from dhcp agent

54.6. NETWORK AGENT REMOVE ROUTER

Remove router from an agent

Usage:

```
openstack network agent remove router [-h] [--l3] <agent-id> <router>
```

Table 54.14. Positional Arguments

Value	Summary
<agent-id>	Agent from which router will be removed (id only)
<router>	Router to be removed from an agent (name or id)

Table 54.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--l3	Remove router from an l3 agent

54.7. NETWORK AGENT SET

Set network agent properties

Usage:

```
openstack network agent set [-h] [--description <description>]
                             [--enable | --disable]
                             <network-agent>
```

Table 54.16. Positional Arguments

Value	Summary
<network-agent>	Network agent to modify (id only)

Table 54.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Set network agent description
--enable	Enable network agent
--disable	Disable network agent

54.8. NETWORK AGENT SHOW

Display network agent details

Usage:


```

openstack network agent show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <network-agent>

```

Table 54.18. Positional Arguments

Value	Summary
<network-agent>	Network agent to display (id only)

Table 54.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.20. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.21. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.22. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.23. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.9. NETWORK AUTO ALLOCATED TOPOLOGY CREATE

Create the auto allocated topology for project

Usage:

```
openstack network auto allocated topology create [-h]
          [-f {json,shell,table,value,yaml}]
          [-c COLUMN]
          [--noindent]
          [--prefix PREFIX]
          [--max-width <integer>]
          [--fit-width]
          [--print-empty]
          [--project <project>]
          [--project-domain <project-domain>]
          [--check-resources]
          [--or-show]
```

Table 54.24. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--project <project></code>	Return the auto allocated topology for a given project. Default is current project
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--check-resources</code>	Validate the requirements for auto allocated topology. Does not return a topology.

Value	Summary
<code>--or-show</code>	If topology exists returns the topology's information (Default)

Table 54.25. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.26. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.27. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.28. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.10. NETWORK AUTO ALLOCATED TOPOLOGY DELETE

Delete auto allocated topology for project

Usage:

```
openstack network auto allocated topology delete [-h]
                                           [--project <project>]
                                           [--project-domain <project-domain>]
```

Table 54.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Delete auto allocated topology for a given project. Default is the current project
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

54.11. NETWORK CREATE

Create new network

Usage:

```
openstack network create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--share | --no-share]
                        [--enable | --disable] [--project <project>]
                        [--description <description>] [--mtu <mtu>]
                        [--project-domain <project-domain>]
                        [--availability-zone-hint <availability-zone>]
                        [--enable-port-security | --disable-port-security]
                        [--external | --internal]
                        [--default | --no-default]
                        [--qos-policy <qos-policy>]
                        [--transparent-vlan | --no-transparent-vlan]
                        [--provider-network-type <provider-network-type>]
                        [--provider-physical-network <provider-physical-network>]
                        [--provider-segment <provider-segment>]
                        [--dns-domain <dns-domain>]
                        [--tag <tag> | --no-tag]
                        <name>
```

Table 54.30. Positional Arguments

Value	Summary
<name>	New network name

Table 54.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--share	Share the network between projects
--no-share	Do not share the network between projects
--enable	Enable network (default)
--disable	Disable network
--project <project>	Owner's project (name or id)
--description <description>	Set network description
--mtu <mtu>	Set network mtu
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--availability-zone-hint <availability-zone>	Availability zone in which to create this network (Network Availability Zone extension required, repeat option to set multiple availability zones)
--enable-port-security	Enable port security by default for ports created on this network (default)
--disable-port-security	Disable port security by default for ports created on this network
--external	Set this network as an external network (external-net extension required)
--internal	Set this network as an internal network (default)
--default	Specify if this network should be used as the default external network
--no-default	Do not use the network as the default external network (default)
--qos-policy <qos-policy>	Qos policy to attach to this network (name or id)
--transparent-vlan	Make the network vlan transparent

Value	Summary
<code>--no-transparent-vlan</code>	Do not make the network vlan transparent
<code>--provider-network-type <provider-network-type></code>	The physical mechanism by which the virtual network is implemented. For example: flat, geneve, gre, local, vlan, vxlan.
<code>--provider-physical-network <provider-physical-network></code>	Name of the physical network over which the virtual network is implemented
<code>--provider-segment <provider-segment></code>	Vlan id for vlan networks or tunnel id for GENEVE/GRE/VXLAN networks
<code>--dns-domain <dns-domain></code>	Set dns domain for this network (requires dns integration extension)
<code>--tag <tag></code>	Tag to be added to the network (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the network

Table 54.32. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.33. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.34. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.35. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.12. NETWORK DELETE

Delete network(s)

Usage:

```
openstack network delete [-h] <network> [<network> ...]
```

Table 54.36. Positional Arguments

Value	Summary
<code><network></code>	Network(s) to delete (name or id)

Table 54.37. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.13. NETWORK FLAVOR ADD PROFILE

Add a service profile to a network flavor

Usage:

```
openstack network flavor add profile [-h] <flavor> <service-profile>
```

Table 54.38. Positional Arguments

Value	Summary
<code><flavor></code>	Network flavor (name or id)
<code><service-profile></code>	Service profile (id only)

Table 54.39. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

54.14. NETWORK FLAVOR CREATE

Create new network flavor

Usage:

```

openstack network flavor create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] --service-type
                                <service-type>
                                [--description DESCRIPTION]
                                [--project <project>]
                                [--project-domain <project-domain>]
                                [--enable | --disable]
                                <name>

```

Table 54.40. Positional Arguments

Value	Summary
<name>	Name for the flavor

Table 54.41. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--service-type <service-type>	Service type to which the flavor applies to: e.g. vpn (See openstack network service provider list for loaded examples.)
--description DESCRIPTION	Description for the flavor
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--enable	Enable the flavor (default)

Value	Summary
<code>--disable</code>	Disable the flavor

Table 54.42. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.43. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.44. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.45. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.15. NETWORK FLAVOR DELETE

Delete network flavors

Usage:

-

```
openstack network flavor delete [-h] <flavor> [<flavor> ...]
```

Table 54.46. Positional Arguments

Value	Summary
<flavor>	Flavor(s) to delete (name or id)

Table 54.47. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

54.16. NETWORK FLAVOR LIST

List network flavors

Usage:

```
openstack network flavor list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
```

Table 54.48. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.49. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.50. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.51. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.52. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.17. NETWORK FLAVOR PROFILE CREATE

Create new network flavor profile

Usage:

```
openstack network flavor profile create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--project <project>]
                                         [--project-domain <project-domain>]
                                         [--description <description>]
                                         [--enable | --disable]
                                         [--driver DRIVER]
                                         [--metainfo METAINFO]
```

Table 54.53. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--description <description></code>	Description for the flavor profile
<code>--enable</code>	Enable the flavor profile
<code>--disable</code>	Disable the flavor profile
<code>--driver DRIVER</code>	Python module path to driver. this becomes required if <code>--metainfo</code> is missing and vice versa
<code>--metainfo METAINFO</code>	Metainfo for the flavor profile. this becomes required if <code>--driver</code> is missing and vice versa

Table 54.54. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.55. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.56. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.57. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.18. NETWORK FLAVOR PROFILE DELETE

Delete network flavor profile

Usage:

```
openstack network flavor profile delete [-h]
                                     <flavor-profile>
                                     [<flavor-profile> ...]
```

Table 54.58. Positional Arguments

Value	Summary
<code><flavor-profile></code>	Flavor profile(s) to delete (id only)

Table 54.59. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.19. NETWORK FLAVOR PROFILE LIST

List network flavor profile(s)

Usage:

```
openstack network flavor profile list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
```

Table 54.60. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.61. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.62. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.63. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.64. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.20. NETWORK FLAVOR PROFILE SET

Set network flavor profile properties

Usage:

```
openstack network flavor profile set [-h]
                                     [--project-domain <project-domain>]
                                     [--description <description>]
                                     [--enable | --disable]
                                     [--driver DRIVER]
                                     [--metainfo METAINFO]
                                     <flavor-profile>
```

Table 54.65. Positional Arguments

Value	Summary
<flavor-profile>	Flavor profile to update (id only)

Table 54.66. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--description <description>	Description for the flavor profile
--enable	Enable the flavor profile
--disable	Disable the flavor profile
--driver DRIVER	Python module path to driver. this becomes required if --metainfo is missing and vice versa
--metainfo METAINFO	Metainfo for the flavor profile. this becomes required if --driver is missing and vice versa

54.21. NETWORK FLAVOR PROFILE SHOW

Display network flavor profile details

Usage:

```
openstack network flavor profile show [-h]
                                       [-f {json,shell,table,value,yaml}]
                                       [-c COLUMN] [--noindent]
                                       [--prefix PREFIX]
```

```

[--max-width <integer>]
[--fit-width] [--print-empty]
<flavor-profile>

```

Table 54.67. Positional Arguments

Value	Summary
<flavor-profile>	Flavor profile to display (id only)

Table 54.68. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.69. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.70. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.71. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.72. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.22. NETWORK FLAVOR REMOVE PROFILE

Remove service profile from network flavor

Usage:

```
openstack network flavor remove profile [-h] <flavor> <service-profile>
```

Table 54.73. Positional Arguments

Value	Summary
<flavor>	Network flavor (name or id)
<service-profile>	Service profile (id only)

Table 54.74. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

54.23. NETWORK FLAVOR SET

Set network flavor properties

Usage:

```
openstack network flavor set [-h] [--description DESCRIPTION]
                             [--disable | --enable] [--name <name>]
                             <flavor>
```

Table 54.75. Positional Arguments

Value	Summary
<flavor>	Flavor to update (name or id)

Table 54.76. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description DESCRIPTION	Set network flavor description
--disable	Disable network flavor
--enable	Enable network flavor
--name <name>	Set flavor name

54.24. NETWORK FLAVOR SHOW

Display network flavor details

Usage:

```

openstack network flavor show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               <flavor>

```

Table 54.77. Positional Arguments

Value	Summary
<flavor>	Flavor to display (name or id)

Table 54.78. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.79. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.80. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.81. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 54.82. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.25. NETWORK LIST

List networks

Usage:

```
openstack network list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--external | --internal] [--long]
                        [--name <name>] [--enable | --disable]
                        [--project <project>]
                        [--project-domain <project-domain>]
                        [--share | --no-share] [--status <status>]
                        [--provider-network-type <provider-network-type>]
                        [--provider-physical-network <provider-physical-network>]
                        [--provider-segment <provider-segment>]
                        [--agent <agent-id>] [--tags <tag>[,<tag>,....]]
```

```

[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]

```

Table 54.83. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--external	List external networks
--internal	List internal networks
--long	List additional fields in output
--name <name>	List networks according to their name
--enable	List enabled networks
--disable	List disabled networks
--project <project>	List networks according to their project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--share	List networks shared between projects
--no-share	List networks not shared between projects
--status <status>	List networks according to their status (<i>active</i> , <i>BUILD</i> , <i>DOWN</i> , <i>ERROR</i>)
--provider-network-type <provider-network-type>	List networks according to their physical mechanisms. The supported options are: flat, geneve, gre, local, vlan, vxlan.
--provider-physical-network <provider-physical-network>	List networks according to name of the physical network
--provider-segment <provider-segment>	List networks according to vlan id for vlan networks or Tunnel ID for GENEVE/GRE/VXLAN networks
--agent <agent-id>	List networks hosted by agent (id only)
--tags <tag>[,<tag>,...]	List networks which have all given tag(s) (comma-separated list of tags)

Value	Summary
<code>--any-tags <tag>[,<tag>,...]</code>	List networks which have any given tag(s) (comma-separated list of tags)
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude networks which have all given tag(s) (comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude networks which have any given tag(s) (comma-separated list of tags)

Table 54.84. Output Formatters

Value	Summary
<code>output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.85. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.86. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.87. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.26. NETWORK LOG CREATE

Create a new network log

Usage:

```

openstack network log create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             [--description <description>]
                             [--enable | --disable]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             [--event <event>] --resource-type
                             <resource-type> [--resource <resource>]
                             [--target <target>]
                             <name>

```

Table 54.88. Positional Arguments

Value	Summary
<name>	Name for the network log

Table 54.89. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the network log
--enable	Enable this log (default is disabled)
--disable	Disable this log
--project <project>	Owner's project (name or id)

Value	Summary
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--event <event></code>	An event to store with log
<code>--resource-type <resource-type></code>	Network log type(s). you can see supported type(s) with following command: <code>\$ openstack network loggable resources list</code>
<code>--resource <resource></code>	Name or id of resource (security group or firewall group) that used for logging. You can control for logging target combination with <code>--target</code> option.
<code>--target <target></code>	Port (name or id) for logging. you can control for logging target combination with <code>--resource</code> option.

Table 54.90. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.91. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.92. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.93. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.27. NETWORK LOG DELETE

Delete network log(s)

Usage:

```
openstack network log delete [-h] <network-log> [<network-log> ...]
```

Table 54.94. Positional Arguments

Value	Summary
<code><network-log></code>	Network log(s) to delete (name or id)

Table 54.95. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.28. NETWORK LOG LIST

List network logs

Usage:

```
openstack network log list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN] [--long]
```

Table 54.96. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 54.97. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.98. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.99. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.100. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.29. NETWORK LOG SET

Set network log properties

Usage:

```
openstack network log set [-h] [--description <description>]
                          [--enable | --disable] [--name <name>]
                          <network-log>
```

Table 54.101. Positional Arguments

Value	Summary
<network-log>	Network log to set (name or id)

Table 54.102. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the network log
--enable	Enable this log (default is disabled)
--disable	Disable this log
--name <name>	Name of the network log

54.30. NETWORK LOG SHOW

Display network log details

Usage:

```
openstack network log show [-h] [-f {json,shell,table,value,yaml}]
                           [-c COLUMN] [--noindent] [--prefix PREFIX]
                           [--max-width <integer>] [--fit-width]
                           [--print-empty]
                           <network-log>
```

Table 54.103. Positional Arguments

Value	Summary
<network-log>	Network log to show (name or id)

Table 54.104. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.105. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.106. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.107. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.108. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.31. NETWORK LOGGABLE RESOURCES LIST

List supported loggable resources

Usage:

■

```

openstack network loggable resources list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--long]

```

Table 54.109. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 54.110. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.111. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.112. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.113. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.32. NETWORK METER CREATE

Create network meter

Usage:

```
openstack network meter create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description <description>]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               [--share | --no-share]
                               <name>
```

Table 54.114. Positional Arguments

Value	Summary
<code><name></code>	Name of meter

Table 54.115. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description <description></code>	Create description for meter
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Value	Summary
--share	Share meter between projects
--no-share	Do not share meter between projects

Table 54.116. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.117. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.118. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.119. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.33. NETWORK METER DELETE

Delete network meter

Usage:

```
openstack network meter delete [-h] <meter> [<meter> ...]
```

Table 54.120. Positional Arguments

Value	Summary
<meter>	Meter to delete (name or id)

Table 54.121. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

54.34. NETWORK METER LIST

List network meters

Usage:

```
openstack network meter list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
```

Table 54.122. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.123. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.124. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.125. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.126. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.35. NETWORK METER RULE CREATE

Create a new meter rule

Usage:

```

openstack network meter rule create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--project <project>]
                                     [--project-domain <project-domain>]
                                     [--exclude | --include]
                                     [--ingress | --egress]
                                     --remote-ip-prefix
                                     <remote-ip-prefix>
                                     <meter>

```

Table 54.127. Positional Arguments

Value	Summary
<meter>	Label to associate with this metering rule (name or ID)

Table 54.128. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--exclude	Exclude remote ip prefix from traffic count
--include	Include remote ip prefix from traffic count (default)
--ingress	Apply rule to incoming network traffic (default)
--egress	Apply rule to outgoing network traffic
--remote-ip-prefix <remote-ip-prefix>	The remote ip prefix to associate with this rule

Table 54.129. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.130. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.131. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.132. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.36. NETWORK METER RULE DELETE

Delete meter rule(s)

Usage:

```
openstack network meter rule delete [-h]
                                     <meter-rule-id>
                                     [<meter-rule-id> ...]
```

Table 54.133. Positional Arguments

Value	Summary
<meter-rule-id>	Meter rule to delete (id only)

Table 54.134. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

54.37. NETWORK METER RULE LIST

List meter rules

Usage:

```

openstack network meter rule list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]

```

Table 54.135. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.136. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.137. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.138. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.139. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.38. NETWORK METER RULE SHOW

Display meter rules details

Usage:

```
openstack network meter rule show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]
                                  [--max-width <integer>] [--fit-width]
                                  [--print-empty]
                                  <meter-rule-id>
```

Table 54.140. Positional Arguments

Value	Summary
<meter-rule-id>	Meter rule (id only)

Table 54.141. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.142. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.143. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.144. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

Table 54.145. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.39. NETWORK METER SHOW

Show network meter

Usage:

```
openstack network meter show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <meter>
```

Table 54.146. Positional Arguments

Value	Summary
<code><meter></code>	Meter to display (name or id)

Table 54.147. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.148. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.149. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.150. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.151. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.40. NETWORK ONBOARD SUBNETS

Onboard network subnets into a subnet pool

Usage:

■

```
openstack network onboard subnets [-h] <network> <subnetpool>
```

Table 54.152. Positional Arguments

Value	Summary
<network>	Onboard all subnets associated with this network
<subnetpool>	Target subnet pool for onboarding subnets

Table 54.153. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

54.41. NETWORK QOS POLICY CREATE

Create a QoS policy

Usage:

```
openstack network qos policy create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--description <description>]
                                   [--share | --no-share]
                                   [--project <project>]
                                   [--project-domain <project-domain>]
                                   [--default | --no-default]
                                   <name>
```

Table 54.154. Positional Arguments

Value	Summary
<name>	Name of qos policy to create

Table 54.155. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the qos policy

Value	Summary
--share	Make the qos policy accessible by other projects
--no-share	Make the qos policy not accessible by other projects (default)
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--default	Set this as a default network qos policy
--no-default	Set this as a non-default network qos policy

Table 54.156. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.157. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.158. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.159. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.42. NETWORK QOS POLICY DELETE

Delete Qos Policy(s)

Usage:

```
openstack network qos policy delete [-h]
                                   <qos-policy> [<qos-policy> ...]
```

Table 54.160. Positional Arguments

Value	Summary
<code><qos-policy></code>	Qos policy(s) to delete (name or id)

Table 54.161. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.43. NETWORK QOS POLICY LIST

List QoS policies

Usage:

```
openstack network qos policy list [-h] [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--noindent] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--sort-column SORT_COLUMN]
```

```

[--project <project>]
[--project-domain <project-domain>]
[--share | --no-share]

```

Table 54.162. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	List qos policies according to their project (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--share	List qos policies shared between projects
--no-share	List qos policies not shared between projects

Table 54.163. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.164. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.165. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.166. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.44. NETWORK QOS POLICY SET

Set QoS policy properties

Usage:

```
openstack network qos policy set [-h] [--name <name>]
                                [--description <description>]
                                [--share | --no-share]
                                [--default | --no-default]
                                <qos-policy>
```

Table 54.167. Positional Arguments

Value	Summary
<code><qos-policy></code>	Qos policy to modify (name or id)

Table 54.168. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Set qos policy name
<code>--description <description></code>	Description of the qos policy
<code>--share</code>	Make the qos policy accessible by other projects
<code>--no-share</code>	Make the qos policy not accessible by other projects
<code>--default</code>	Set this as a default network qos policy
<code>--no-default</code>	Set this as a non-default network qos policy

54.45. NETWORK QOS POLICY SHOW

Display QoS policy details

Usage:

```
openstack network qos policy show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <qos-policy>
```

Table 54.169. Positional Arguments

Value	Summary
<qos-policy>	Qos policy to display (name or id)

Table 54.170. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.171. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.172. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.173. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.174. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.46. NETWORK QOS RULE CREATE

Create new Network QoS rule

Usage:

```
openstack network qos rule create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--type <type>]
                                [--max-kbps <max-kbps>]
                                [--max-burst-kbits <max-burst-kbits>]
                                [--dscp-mark <dscp-mark>]
                                [--min-kbps <min-kbps>]
                                [--ingress | --egress]
                                <qos-policy>
```

Table 54.175. Positional Arguments

Value	Summary
<code><qos-policy></code>	Qos policy that contains the rule (name or id)

Table 54.176. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--type <type></code>	Qos rule type (minimum-bandwidth, dscp-marking, bandwidth-limit)
<code>--max-kbps <max-kbps></code>	Maximum bandwidth in kbps

Value	Summary
<code>--max-burst-kbits <max-burst-kbits></code>	Maximum burst in kilobits, 0 or not specified means automatic, which is 80% of the bandwidth limit, which works for typical TCP traffic. For details check the QoS user workflow.
<code>--dscp-mark <dscp-mark></code>	Dscp mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54
<code>--min-kbps <min-kbps></code>	Minimum guaranteed bandwidth in kbps
<code>--ingress</code>	Ingress traffic direction from the project point of view
<code>--egress</code>	Egress traffic direction from the project point of view

Table 54.177. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.178. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.179. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 54.180. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.47. NETWORK QOS RULE DELETE

Delete Network QoS rule

Usage:

```
openstack network qos rule delete [-h] <qos-policy> <rule-id>
```

Table 54.181. Positional Arguments

Value	Summary
<code><qos-policy></code>	Qos policy that contains the rule (name or id)
<code><rule-id></code>	Network qos rule to delete (id)

Table 54.182. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.48. NETWORK QOS RULE LIST

List Network QoS rules

Usage:

```
openstack network qos rule list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                <qos-policy>
```

Table 54.183. Positional Arguments

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)

Table 54.184. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.185. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.186. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.187. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.188. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.49. NETWORK QOS RULE SET

Set Network QoS rule properties

Usage:

```
openstack network qos rule set [-h] [--max-kbps <max-kbps>]
                               [--max-burst-kbits <max-burst-kbits>]
                               [--dscp-mark <dscp-mark>]
                               [--min-kbps <min-kbps>]
                               [--ingress | --egress]
                               <qos-policy> <rule-id>
```

Table 54.189. Positional Arguments

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)
<rule-id>	Network qos rule to delete (id)

Table 54.190. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--max-kbps <max-kbps>	Maximum bandwidth in kbps
--max-burst-kbits <max-burst-kbits>	Maximum burst in kilobits, 0 or not specified means automatic, which is 80% of the bandwidth limit, which works for typical TCP traffic. For details check the QoS user workflow.
--dscp-mark <dscp-mark>	Dscp mark: value can be 0, even numbers from 8-56, excluding 42, 44, 50, 52, and 54
--min-kbps <min-kbps>	Minimum guaranteed bandwidth in kbps

Value	Summary
--ingress	Ingress traffic direction from the project point of view
--egress	Egress traffic direction from the project point of view

54.50. NETWORK QOS RULE SHOW

Display Network QoS rule details

Usage:

```
openstack network qos rule show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <qos-policy> <rule-id>
```

Table 54.191. Positional Arguments

Value	Summary
<qos-policy>	Qos policy that contains the rule (name or id)
<rule-id>	Network qos rule to delete (id)

Table 54.192. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.193. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.194. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.195. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 54.196. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.51. NETWORK QOS RULE TYPE LIST

List QoS rule types

Usage:

```
openstack network qos rule type list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
```

Table 54.197. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 54.198. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.199. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.200. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.201. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.52. NETWORK QOS RULE TYPE SHOW

Show details about supported QoS rule type

Usage:

```
openstack network qos rule type show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
```

```

[--max-width <integer>]
[--fit-width] [--print-empty]
<qos-rule-type-name>

```

Table 54.202. Positional Arguments

Value	Summary
<qos-rule-type-name>	Name of qos rule type

Table 54.203. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.204. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.205. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.206. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.207. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.53. NETWORK RBAC CREATE

Create network RBAC policy

Usage:

```
openstack network rbac create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty] --type
                             <type> --action <action>
                             (--target-project <target-project> | --target-all-projects)
                             [--target-project-domain <target-project-domain>]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             <rbac-object>
```

Table 54.208. Positional Arguments

Value	Summary
<rbac-object>	The object to which this rbac policy affects (name or ID)

Table 54.209. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type <type>	Type of the object that rbac policy affects ("qos_policy" or "network")
--action <action>	Action for the rbac policy ("access_as_external" or "access_as_shared")
--target-project <target-project>	The project to which the rbac policy will be enforced (name or ID)
--target-all-projects	Allow creating rbac policy for all projects.

Value	Summary
<code>--target-project-domain <target-project-domain></code>	Domain the target project belongs to (name or id). This can be used in case collisions between project names exist.
<code>--project <project></code>	The owner project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 54.210. Output Formatters

Value	Summary
output formatter options- <code>f</code> {json,shell,table,value,yaml}, <code>--format</code> {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.211. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.212. Shell Formatter

Value	Summary
a format a UNIX shell can parse (<code>variable="value"</code>)-- <code>prefix PREFIX</code>	Add a prefix to all variable names

Table 54.213. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

54.54. NETWORK RBAC DELETE

Delete network RBAC policy(s)

Usage:

```
openstack network rbac delete [-h] <rbac-policy> [<rbac-policy> ...]
```

Table 54.214. Positional Arguments

Value	Summary
<code><rbac-policy></code>	Rbac policy(s) to delete (id only)

Table 54.215. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.55. NETWORK RBAC LIST

List network RBAC policies

Usage:

```
openstack network rbac list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN] [--type <type>]
                             [--action <action>] [--long]
```

Table 54.216. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--type <type></code>	List network rbac policies according to given object type ("qos_policy" or "network")

Value	Summary
<code>--action <action></code>	List network rbac policies according to given action ("access_as_external" or "access_as_shared")
<code>--long</code>	List additional fields in output

Table 54.217. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.218. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.219. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.220. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.56. NETWORK RBAC SET

Set network RBAC policy properties

Usage:

```
openstack network rbac set [-h] [--target-project <target-project>]
                             [--target-project-domain <target-project-domain>]
                             <rbac-policy>
```

Table 54.221. Positional Arguments

Value	Summary
<rbac-policy>	Rbac policy to be modified (id only)

Table 54.222. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--target-project <target-project>	The project to which the rbac policy will be enforced (name or ID)
--target-project-domain <target-project-domain>	Domain the target project belongs to (name or id). This can be used in case collisions between project names exist.

54.57. NETWORK RBAC SHOW

Display network RBAC policy details

Usage:

```
openstack network rbac show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <rbac-policy>
```

Table 54.223. Positional Arguments

Value	Summary
<rbac-policy>	Rbac policy (id only)

Table 54.224. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.225. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.226. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.227. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.228. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.58. NETWORK SEGMENT CREATE

Create new network segment

Usage:

■

```

openstack network segment create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty]
    [--description <description>]
    [--physical-network <physical-network>]
    [--segment <segment>] --network
    <network> --network-type
    <network-type>
    <name>

```

Table 54.229. Positional Arguments

Value	Summary
<name>	New network segment name

Table 54.230. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Network segment description
--physical-network <physical-network>	Physical network name of this network segment
--segment <segment>	Segment identifier for this network segment which is based on the network type, VLAN ID for vlan network type and tunnel ID for geneve, gre and vxlan network types
--network <network>	Network this network segment belongs to (name or id)
--network-type <network-type>	Network type of this network segment (flat, geneve, gre, local, vlan or vxlan)

Table 54.231. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.232. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.233. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 54.234. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.59. NETWORK SEGMENT DELETE

Delete network segment(s)

Usage:

```
openstack network segment delete [-h]
                                <network-segment>
                                [<network-segment> ...]
```

Table 54.235. Positional Arguments

Value	Summary
<code><network-segment></code>	Network segment(s) to delete (name or id)

Table 54.236. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

54.60. NETWORK SEGMENT LIST

List network segments

Usage:

```
openstack network segment list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN] [--long]
                               [--network <network>]
```

Table 54.237. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--network <network>	List network segments that belong to this network (name or ID)

Table 54.238. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.239. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.240. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.241. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.61. NETWORK SEGMENT RANGE CREATE

Create new network segment range

Usage:

```

openstack network segment range create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--private | --shared]
    [--project <project>]
    [--project-domain <project-domain>]
    --network-type <network-type>
    [--physical-network <physical-network-name>]
    --minimum
    <minimum-segmentation-id>
    --maximum
    <maximum-segmentation-id>
    <name>

```

Table 54.242. Positional Arguments

Value	Summary
<name>	Name of new network segment range

Table 54.243. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--private	Network segment range is assigned specifically to the project
--shared	Network segment range is shared with other projects
--project <project>	Network segment range owner (name or id). optional when the segment range is shared
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--network-type <network-type>	Network type of this network segment range (geneve, gre, vlan or vxlan)
--physical-network <physical-network-name>	Physical network name of this network segment range
--minimum <minimum-segmentation-id>	Minimum segment identifier for this network segment range which is based on the network type, VLAN ID for vlan network type and tunnel ID for geneve, gre and vxlan network types
--maximum <maximum-segmentation-id>	Maximum segment identifier for this network segment range which is based on the network type, VLAN ID for vlan network type and tunnel ID for geneve, gre and vxlan network types

Table 54.244. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.245. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.246. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.247. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.62. NETWORK SEGMENT RANGE DELETE

Delete network segment range(s)

Usage:

```
openstack network segment range delete [-h]
                                     <network-segment-range>
                                     [<network-segment-range> ...]
```

Table 54.248. Positional Arguments

Value	Summary
<network-segment-range>	Network segment range(s) to delete (name or id)

Table 54.249. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

54.63. NETWORK SEGMENT RANGE LIST

List network segment ranges

Usage:

```

openstack network segment range list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--long] [--used | --unused]
                                     [--available | --unavailable]

```

Table 54.250. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--used	List network segment ranges that have segments in use
--unused	List network segment ranges that have segments not in use
--available	List network segment ranges that have available segments
--unavailable	List network segment ranges without available segments

Table 54.251. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.252. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 54.253. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.254. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.64. NETWORK SEGMENT RANGE SET

Set network segment range properties

Usage:

```
openstack network segment range set [-h] [--name <name>]
                                     [--minimum <minimum-segmentation-id>]
                                     [--maximum <maximum-segmentation-id>]
                                     <network-segment-range>
```

Table 54.255. Positional Arguments

Value	Summary
<code><network-segment-range></code>	Network segment range to modify (name or id)

Table 54.256. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--name <name></code>	Set network segment name
<code>--minimum <minimum-segmentation-id></code>	Set network segment range minimum segment identifier
<code>--maximum <maximum-segmentation-id></code>	Set network segment range maximum segment identifier

54.65. NETWORK SEGMENT RANGE SHOW

Display network segment range details

Usage:

```
openstack network segment range show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <network-segment-range>
```

Table 54.257. Positional Arguments

Value	Summary
<code><network-segment-range></code>	Network segment range to display (name or id)

Table 54.258. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 54.259. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.260. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.261. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 54.262. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.66. NETWORK SEGMENT SET

Set network segment properties

Usage:

```
openstack network segment set [-h] [--description <description>]
                               [--name <name>]
                               <network-segment>
```

Table 54.263. Positional Arguments

Value	Summary
<code><network-segment></code>	Network segment to modify (name or id)

Table 54.264. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--description <description></code>	Set network segment description
<code>--name <name></code>	Set network segment name

54.67. NETWORK SEGMENT SHOW

Display network segment details

Usage:

```
openstack network segment show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <network-segment>
```

Table 54.265. Positional Arguments

Value	Summary
<code><network-segment></code>	Network segment to display (name or id)

Table 54.266. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 54.267. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.268. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.269. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.270. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.68. NETWORK SERVICE PROVIDER LIST

List Service Providers

Usage:

```

openstack network service provider list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]

```

Table 54.271. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.272. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.273. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.274. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.275. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.69. NETWORK SET

Set network properties

Usage:

```
openstack network set [-h] [--name <name>] [--enable | --disable]
                    [--share | --no-share]
                    [--description <description>] [--mtu <mtu>]
                    [--enable-port-security | --disable-port-security]
                    [--external | --internal]
                    [--default | --no-default]
                    [--qos-policy <qos-policy> | --no-qos-policy]
                    [--tag <tag>] [--no-tag]
```



```

[--provider-network-type <provider-network-type>]
[--provider-physical-network <provider-physical-network>]
[--provider-segment <provider-segment>]
[--dns-domain <dns-domain>]
<network>

```

Table 54.276. Positional Arguments

Value	Summary
<network>	Network to modify (name or id)

Table 54.277. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set network name
--enable	Enable network
--disable	Disable network
--share	Share the network between projects
--no-share	Do not share the network between projects
--description <description>	Set network description
--mtu <mtu>	Set network mtu
--enable-port-security	Enable port security by default for ports created on this network
--disable-port-security	Disable port security by default for ports created on this network
--external	Set this network as an external network (external-net extension required)
--internal	Set this network as an internal network
--default	Set the network as the default external network
--no-default	Do not use the network as the default external network

Value	Summary
<code>--qos-policy <qos-policy></code>	Qos policy to attach to this network (name or id)
<code>--no-qos-policy</code>	Remove the qos policy attached to this network
<code>--tag <tag></code>	Tag to be added to the network (repeat option to set multiple tags)
<code>--no-tag</code>	Clear tags associated with the network. specify both <code>--tag</code> and <code>--no-tag</code> to overwrite current tags
<code>--provider-network-type <provider-network-type></code>	The physical mechanism by which the virtual network is implemented. For example: flat, geneve, gre, local, vlan, vxlan.
<code>--provider-physical-network <provider-physical-network></code>	Name of the physical network over which the virtual network is implemented
<code>--provider-segment <provider-segment></code>	Vlan id for vlan networks or tunnel id for GENEVE/GRE/VXLAN networks
<code>--dns-domain <dns-domain></code>	Set dns domain for this network (requires dns integration extension)

54.70. NETWORK SHOW

Show network details

Usage:

```

openstack network show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <network>

```

Table 54.278. Positional Arguments

Value	Summary
<code><network></code>	Network to display (name or id)

Table 54.279. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 54.280. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.281. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.282. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.283. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.71. NETWORK SUPPORT LIST

List all subports for a given network trunk

Usage:

```
openstack network subport list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN] --trunk
<trunk>

```

Table 54.284. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--trunk <trunk>	List subports belonging to this trunk (name or id)

Table 54.285. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.286. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.287. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.288. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

54.72. NETWORK TRUNK CREATE

Create a network trunk for a given project

Usage:

```
openstack network trunk create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description <description>]
                               --parent-port <parent-port>
                               [--subport <port=,segmentation-type=,segmentation-id=>]
                               [--enable | --disable]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               <name>
```

Table 54.289. Positional Arguments

Value	Summary
<code><name></code>	Name of the trunk to create

Table 54.290. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description <description></code>	A description of the trunk
<code>--parent-port <parent-port></code>	Parent port belonging to this trunk (name or id)
<code>--subport <port=,segmentation-type=,segmentation-id=></code>	Subport to add. subport is of form <code>port=<name or ID>,segmentation-type=,segmentation-ID=</code> (<code>--subport</code>) option can be repeated

Value	Summary
<code>--enable</code>	Enable trunk (default)
<code>--disable</code>	Disable trunk
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 54.291. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 54.292. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 54.293. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.294. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

54.73. NETWORK TRUNK DELETE

Delete a given network trunk

Usage:

```
openstack network trunk delete [-h] <trunk> [<trunk> ...]
```

Table 54.295. Positional Arguments

Value	Summary
<code><trunk></code>	Trunk(s) to delete (name or id)

Table 54.296. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

54.74. NETWORK TRUNK LIST

List all network trunks

Usage:

```
openstack network trunk list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN] [--long]
```

Table 54.297. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	List additional fields in output

Table 54.298. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 54.299. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 54.300. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.301. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.75. NETWORK TRUNK SET

Set network trunk properties

Usage:

```
openstack network trunk set [-h] [--name <name>]
                             [--description <description>]
                             [--subport <port=,segmentation-type=,segmentation-id=>]
```



```
[--enable | --disable]
<trunk>
```

Table 54.302. Positional Arguments

Value	Summary
<trunk>	Trunk to modify (name or id)

Table 54.303. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set trunk name
--description <description>	A description of the trunk
--subport <port=,segmentation-type=,segmentation-id=>	Subport to add. subport is of form <i>port=<name or ID>,segmentation-type=,segmentation-ID=(--subport)</i> option can be repeated
--enable	Enable trunk
--disable	Disable trunk

54.76. NETWORK TRUNK SHOW

Show information of a given network trunk

Usage:

```
openstack network trunk show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <trunk>
```

Table 54.304. Positional Arguments

Value	Summary
<trunk>	Trunk to display (name or id)

Table 54.305. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 54.306. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 54.307. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 54.308. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 54.309. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

54.77. NETWORK TRUNK UNSET

Unset subports from a given network trunk

Usage:

■

```
openstack network trunk unset [-h] --subport <subport> <trunk>
```

Table 54.310. Positional Arguments

Value	Summary
<trunk>	Unset subports from this trunk (name or id)

Table 54.311. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--subport <subport>	Subport to delete (name or id of the port) (--subport) option can be repeated

54.78. NETWORK UNSET

Unset network properties

Usage:

```
openstack network unset [-h] [--tag <tag> | --all-tag] <network>
```

Table 54.312. Positional Arguments

Value	Summary
<network>	Network to modify (name or id)

Table 54.313. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--tag <tag>	Tag to be removed from the network (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the network

CHAPTER 55. OBJECT

This chapter describes the commands under the **object** command.

55.1. OBJECT CREATE

Upload object to container

Usage:

```
openstack object create [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--name <name>]
                        <container> <filename> [<filename> ...]
```

Table 55.1. Positional Arguments

Value	Summary
<container>	Container for new object
<filename>	Local filename(s) to upload

Table 55.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Upload a file and rename it. can only be used when uploading a single object

Table 55.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 55.4. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 55.5. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 55.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

55.2. OBJECT DELETE

Delete object from container

Usage:

```
openstack object delete [-h] <container> <object> [<object> ...]
```

Table 55.7. Positional Arguments

Value	Summary
<code><container></code>	Delete object(s) from <code><container></code>
<code><object></code>	Object(s) to delete

Table 55.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

55.3. OBJECT LIST

List objects

Usage:

```
openstack object list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN] [--prefix <prefix>]
                    [--delimiter <delimiter>] [--marker <marker>]
                    [--end-marker <end-marker>]
                    [--limit <num-objects>] [--long] [--all]
                    <container>
```

Table 55.9. Positional Arguments

Value	Summary
<container>	Container to list

Table 55.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--prefix <prefix>	Filter list using <prefix>
--delimiter <delimiter>	Roll up items with <delimiter>
--marker <marker>	Anchor for paging
--end-marker <end-marker>	End anchor for paging
--limit <num-objects>	Limit the number of objects returned
--long	List additional fields in output
--all	List all objects in container (default is 10000)

Table 55.11. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 55.12. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 55.13. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 55.14. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

55.4. OBJECT SAVE

Save object locally

Usage:

```
openstack object save [-h] [--file <filename>] <container> <object>
```

Table 55.15. Positional Arguments

Value	Summary
<container>	Download <object> from <container>

Value	Summary
<object>	Object to save

Table 55.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--file <filename>	Destination filename (defaults to object name); using - as the filename will print the file to stdout

55.5. OBJECT SET

Set object properties

Usage:

```
openstack object set [-h] --property <key=value> <container> <object>
```

Table 55.17. Positional Arguments

Value	Summary
<container>	Modify <object> from <container>
<object>	Object to modify

Table 55.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key=value>	Set a property on this object (repeat option to set multiple properties)

55.6. OBJECT SHOW

Display object details

Usage:

```
openstack object show [-h] [-f {json,shell,table,value,yaml}]
```



```

[-c COLUMN] [--noindent] [--prefix PREFIX]
[--max-width <integer>] [--fit-width]
[--print-empty]
<container> <object>

```

Table 55.19. Positional Arguments

Value	Summary
<container>	Display <object> from <container>
<object>	Object to display

Table 55.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 55.21. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 55.22. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 55.23. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 55.24. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

55.7. OBJECT STORE ACCOUNT SET

Set account properties

Usage:

```
openstack object store account set [-h] --property <key=value>
```

Table 55.25. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--property <key=value></code>	Set a property on this account (repeat option to set multiple properties)

55.8. OBJECT STORE ACCOUNT SHOW

Display account details

Usage:

```
openstack object store account show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
```

Table 55.26. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 55.27. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 55.28. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 55.29. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 55.30. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

55.9. OBJECT STORE ACCOUNT UNSET

Unset account properties

Usage:

```
openstack object store account unset [-h] --property <key>
```

Table 55.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from account (repeat option to remove multiple properties)

55.10. OBJECT UNSET

Unset object properties

Usage:

```
openstack object unset [-h] --property <key> <container> <object>
```

Table 55.32. Positional Arguments

Value	Summary
<container>	Modify <object> from <container>
<object>	Object to modify

Table 55.33. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from object (repeat option to remove multiple properties)

CHAPTER 56. ORCHESTRATION

This chapter describes the commands under the **orchestration** command.

56.1. ORCHESTRATION BUILD INFO

Retrieve build information.

Usage:

```
openstack orchestration build info [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>]
                                [--fit-width] [--print-empty]
```

Table 56.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 56.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 56.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 56.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

56.2. ORCHESTRATION RESOURCE TYPE LIST

List resource types.

Usage:

```

openstack orchestration resource type list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         [--filter <key=value>]
                                         [--long]

```

Table 56.6. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--filter <key=value></code>	Filter parameters to apply on returned resource types. This can be specified multiple times. It can be any of name, version or support_status
<code>--long</code>	Show resource types with corresponding description of each resource type.

Table 56.7. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 56.8. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 56.9. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.10. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

56.3. ORCHESTRATION RESOURCE TYPE SHOW

Show details and optionally generate a template for a resource type.

Usage:

```
openstack orchestration resource type show [-h]
                                           [-f {json,shell,table,value,yaml}]
                                           [-c COLUMN] [--noindent]
                                           [--prefix PREFIX]
```

```

[--max-width <integer>]
[--fit-width]
[--print-empty]
[--template-type <template-type>]
[--long]
<resource-type>

```

Table 56.11. Positional Arguments

Value	Summary
<resource-type>	Resource type to show details for

Table 56.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--template-type <template-type>	Optional template type to generate, hot or cfn
--long	Show resource type with corresponding description.

Table 56.13. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 56.14. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.15. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 56.16. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

56.4. ORCHESTRATION SERVICE LIST

List the Heat engines.

Usage:

```

openstack orchestration service list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]

```

Table 56.17. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 56.18. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 56.19. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 56.20. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 56.21. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

56.5. ORCHESTRATION TEMPLATE FUNCTION LIST

List the available functions.

Usage:

```

openstack orchestration template function list [-h]
        [-f {csv,json,table,value,yaml}]
        [-c COLUMN]
        [--quote {all,minimal,none,nonnumeric}]
        [--noindent]
        [--max-width <integer>]
        [--fit-width]
        [--print-empty]
        [--sort-column SORT_COLUMN]
        [--with_conditions]
        <template-version>

```

Table 56.22. Positional Arguments

Value	Summary
<code><template-version></code>	Template version to get the functions for

Table 56.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--with_conditions	Show condition functions for template.

Table 56.24. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 56.25. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 56.26. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.27. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

56.6. ORCHESTRATION TEMPLATE VALIDATE

Validate a template

Usage:

```
openstack orchestration template validate [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [-e <environment>]
                                         [--show-nested]
                                         [--parameter <key=value>]
                                         [--ignore-errors <error1,error2,...>]
                                         -t <template>
```

Table 56.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-e <environment>, --environment <environment>	Path to the environment. can be specified multiple times
--show-nested	Resolve parameters from nested templates as well
--parameter <key=value>	Parameter values used to create the stack. this can be specified multiple times
--ignore-errors <error1,error2,...>	List of heat errors to ignore
-t <template>, --template <template>	Path to the template

Table 56.29. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 56.30. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 56.31. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

Table 56.32. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

56.7. ORCHESTRATION TEMPLATE VERSION LIST

List the available template versions.

Usage:

```

openstack orchestration template version list [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width]
                                         [--print-empty]
                                         [--sort-column SORT_COLUMN]

```

Table 56.33. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 56.34. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 56.35. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 56.36. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 56.37. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 57. OVERCLOUD

This chapter describes the commands under the **overcloud** command.

57.1. OVERCLOUD ADMIN AUTHORIZE

Deploy the ssh keys needed by Mistral.

Usage:

```
openstack overcloud admin authorize [-h] [--stack STACK]
                                   [--overcloud-ssh-user OVERCLOUD_SSH_USER]
                                   [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
                                   [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
```

Table 57.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to overcloud nodes
--overcloud-ssh-key OVERCLOUD_SSH_KEY	Key path for ssh access to overcloud nodes.
--overcloud-ssh-network OVERCLOUD_SSH_NETWORK	Network name to use for ssh access to overcloud nodes.

57.2. OVERCLOUD CONFIG DOWNLOAD

Download Overcloud Config

Usage:

```
openstack overcloud config download [-h] [--name NAME]
                                     [--config-dir CONFIG_DIR]
                                     [--config-type CONFIG_TYPE]
                                     [--no-preserve-config]
```

Table 57.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--name NAME</code>	The name of the plan, which is used for the object storage container, workflow environment and orchestration stack names.
<code>--config-dir CONFIG_DIR</code>	The directory where the configuration files will be pushed
<code>--config-type CONFIG_TYPE</code>	Type of object config to be extract from the deployment, defaults to all keys available
<code>--no-preserve-config</code>	If specified, will delete and recreate the <code>--config-dir</code> if it already exists. Default is to use the existing dir location and overwrite files. Files in <code>--config-dir</code> not from the stack will be preserved by default.

57.3. OVERCLOUD CONTAINER IMAGE BUILD

Build overcloud container images with `kolla-build`.

Usage:

```
openstack overcloud container image build [-h]
                                     [--config-file <yaml config file>]
                                     --kolla-config-file <config
                                     file> [--list-images]
                                     [--list-dependencies]
                                     [--exclude <container-name>]
                                     [--use-buildah]
```

Table 57.3. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--config-file <yaml config file></code>	Yaml config file specifying the images to build. may be specified multiple times. Order is preserved, and later files will override some options in previous files. Other options will append. If not specified, the default set of containers will be built.
<code>--kolla-config-file <config file></code>	Path to a kolla config file to use. multiple config files can be specified, with values in later files taking precedence. By default, tripleo kolla conf file <code>/usr/share/tripleo-common/container-images/tripleo_kolla_config_overrides.conf</code> is added.

Value	Summary
<code>--list-images</code>	Show the images which would be built instead of building them.
<code>--list-dependencies</code>	Show the image build dependencies instead of building them.
<code>--exclude <container-name></code>	Name of a container to match against the list of containers to be built to skip. Can be specified multiple times.
<code>--use-buildah</code>	Use buildah instead of docker to build the images with Kolla.

57.4. OVERCLOUD CONTAINER IMAGE PREPARE

Generate files defining the images, tags and registry.

Usage:

```

openstack overcloud container image prepare [-h]
                                           [--template-file <yaml template file>]
                                           [--pull-source <location>]
                                           [--push-destination <location>]
                                           [--tag <tag>]
                                           [--tag-from-label <image label>]
                                           [--namespace <namespace>]
                                           [--prefix <prefix>]
                                           [--suffix <suffix>]
                                           [--set <variable=value>]
                                           [--exclude <regex>]
                                           [--include <regex>]
                                           [--output-images-file <file path>]
                                           [--environment-file <file path>]
                                           [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
                                           [--output-env-file <file path>]
                                           [--roles-file ROLES_FILE]
                                           [--modify-role MODIFY_ROLE]
                                           [--modify-vars MODIFY_VARS]

```

Table 57.4. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--template-file <yaml template file></code>	Yaml template file which the images config file will be built from. Default: <code>/usr/share/tripleo-common/container-images/overcloud_containers.yaml.j2</code>

Value	Summary
<code>--pull-source <location></code>	Location of image registry to pull images from. (DEPRECATED. Include the registry in <code>--namespace</code>)
<code>--push-destination <location></code>	Location of image registry to push images to. if specified, a <code>push_destination</code> will be set for every image entry.
<code>--tag <tag></code>	Override the default tag substitution. if <code>--tag-from-label</code> is specified, start discovery with this tag. Default: 15.0
<code>--tag-from-label <image label></code>	Use the value of the specified label(s) to discover the tag. Labels can be combined in a template format, for example: <code>{version}-{release}</code>
<code>--namespace <namespace></code>	Override the default namespace substitution. Default: <code>registry.redhat.io/rhosp15-rhel8</code>
<code>--prefix <prefix></code>	Override the default name prefix substitution. Default: <code>openstack-</code>
<code>--suffix <suffix></code>	Override the default name suffix substitution. Default:
<code>--set <variable=value></code>	Set the value of a variable in the template, even if it has no dedicated argument such as <code>--suffix</code> .
<code>--exclude <regex></code>	Pattern to match against resulting imagename entries to exclude from the final output. Can be specified multiple times.
<code>--include <regex></code>	Pattern to match against resulting imagename entries to include in final output. Can be specified multiple times, entries not matching any <code>--include</code> will be excluded. <code>--exclude</code> is ignored if <code>--include</code> is used.
<code>--output-images-file <file path></code>	File to write resulting image entries to, as well as stdout. Any existing file will be overwritten.
<code>--environment-file <file path>, -e <file path></code>	Environment files specifying which services are containerized. Entries will be filtered to only contain images used by containerized services. (Can be specified more than once.)

Value	Summary
<code>--environment-directory <HEAT ENVIRONMENT DIRECTORY></code>	Environment file directories that are automatically added to the update command. Entries will be filtered to only contain images used by containerized services. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--output-env-file <file path></code>	File to write heat environment file which specifies all image parameters. Any existing file will be overwritten.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default roles_data.yaml in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--modify-role MODIFY_ROLE</code>	Name of ansible role to run between every image upload pull and push.
<code>--modify-vars MODIFY_VARS</code>	Ansible variable file containing variables to use when invoking the role <code>--modify-role</code> .

57.5. OVERCLOUD CONTAINER IMAGE TAG DISCOVER

Discover the versioned tag for an image.

Usage:

```
openstack overcloud container image tag discover [-h] --image
          <container image>
          [--tag-from-label <image label>]
```

Table 57.5. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--image <container image></code>	Fully qualified name of the image to discover the tag for (Including registry and stable tag).
<code>--tag-from-label <image label></code>	Use the value of the specified label(s) to discover the tag. Labels can be combined in a template format, for example: <code>{version}-{release}</code>

57.6. OVERCLOUD CONTAINER IMAGE UPLOAD

Push overcloud container images to registries.

Usage:

```
openstack overcloud container image upload [-h] --config-file <yaml
config file>
[--cleanup <full, partial, none>]
```

Table 57.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--config-file <yaml config file>	Yaml config file specifying the image build. may be specified multiple times. Order is preserved, and later files will override some options in previous files. Other options will append.
--cleanup <full, partial, none>	Cleanup behavior for local images left after upload. The default <i>full</i> will attempt to delete all local images. <i>partial</i> will leave images required for deployment on this host. <i>none</i> will do no cleanup.

57.7. OVERCLOUD CREDENTIALS

Create the overcloudrc files

Usage:

```
openstack overcloud credentials [-h] [--directory [DIRECTORY]] plan
```

Table 57.7. Positional Arguments

Value	Summary
plan	The name of the plan you want to create rc files for.

Table 57.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--directory [DIRECTORY]	The directory to create the rc files. defaults to the current directory.

57.8. OVERCLOUD DELETE

Delete overcloud stack and plan

Usage:

```
openstack overcloud delete [-h] [-y] [stack]
```

Table 57.9. Positional Arguments

Value	Summary
stack	Name or id of heat stack to delete(default=env: OVERCLOUD_STACK_NAME)

Table 57.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-y, --yes	Skip yes/no prompt (assume yes).

57.9. OVERCLOUD DEPLOY

Deploy Overcloud

Usage:

```
openstack overcloud deploy [--templates [TEMPLATES]] [--stack STACK]
    [--timeout <TIMEOUT>]
    [--control-scale CONTROL_SCALE]
    [--compute-scale COMPUTE_SCALE]
    [--ceph-storage-scale CEPH_STORAGE_SCALE]
    [--block-storage-scale BLOCK_STORAGE_SCALE]
    [--swift-storage-scale SWIFT_STORAGE_SCALE]
    [--control-flavor CONTROL_FLAVOR]
    [--compute-flavor COMPUTE_FLAVOR]
    [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
    [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
    [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup] [--update-plan-only]
    [--validation-errors-nonfatal]
```

```

[--validation-warnings-fatal]
[--disable-validations]
[--inflight-validations] [--dry-run]
[--run-validations] [--skip-postconfig]
[--force-postconfig]
[--skip-deploy-identifier] [--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG] [--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server] [--config-download]
[--no-config-download]
[--config-download-only]
[--output-dir OUTPUT_DIR]
[--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
[--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
[--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER]

```

Table 57.11. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--control-scale CONTROL_SCALE	New number of control nodes. (deprecated. use an environment file and set the parameter ControllerCount. It will be removed after the "P" release.)
--compute-scale COMPUTE_SCALE	New number of compute nodes. (deprecated. use an environment file and set the parameter ComputeCount. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)
--block-storage-scale BLOCK_STORAGE_SCALE	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter BlockStorageCount. It will be removed after the "P" release.)

Value	Summary
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudSwiftStorageFlavor</code> . It will be removed after the "P" release.)
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--overcloud-ssh-network OVERCLOUD_SSH_NETWORK</code>	Network name to use for ssh access to overcloud nodes.

Value	Summary
<code>--environment-file <HEAT ENVIRONMENT FILE>, -e <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the <code>heat stack-create</code> or <code>heat stack-update</code> command. (Can be specified more than once.)
<code>--environment-directory <HEAT ENVIRONMENT DIRECTORY></code>	Environment file directories that are automatically added to the <code>heat stack-create</code> or <code>heat stack-update</code> commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory. May be an absolute path or the path relative to <code>--templates</code>
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data.yaml</code> in the <code>--templates</code> directory
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.
<code>--disable-validations</code>	Deprecated. disable the pre-deployment validations entirely. These validations are the built-in pre-deployment validations. To enable external validations from <code>tripleo-validations</code> , use the <code>--run-validations</code> flag. These validations are now run via the external validations in <code>tripleo-validations</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.

Value	Summary
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--config-download</code>	Run deployment via config-download mechanism. this is now the default, and this CLI options may be removed in the future.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and associated OpenStack resources. No software configuration will be applied.
<code>--config-download-only</code>	Disable the stack create/update, and only run the config-download workflow to apply the software configuration.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used <code>(/var/lib/mistral/<execution id>)</code> .
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by config-download by default.

Value	Summary
<code>--config-download-timeout</code> <code>CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for config-download steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.
<code>--deployment-python-interpreter</code> <code>DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.

Table 57.12. Registration Parameters

Value	Summary
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.

57.10. OVERCLOUD EXECUTE

Execute a Heat software config on the servers.

Usage:

```
openstack overcloud execute [-h] [-s SERVER_NAME] [-g GROUP] file_in
```

Table 57.13. Positional Arguments

Value	Summary
<code>file_in</code>	None

Table 57.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-s SERVER_NAME, --server_name SERVER_NAME	Nova server_name or partial name to match.
-g GROUP, --group GROUP	Heat software config "group" type. defaults to "script".

57.11. OVERCLOUD EXTERNAL-UPDATE RUN

Run external minor update Ansible playbook This will run the external minor update Ansible playbook, executing tasks from the undercloud. The update playbooks are made available after completion of the *overcloud update prepare* command.

Usage:

```
openstack overcloud external-update run [-h]
                                     [--static-inventory STATIC_INVENTORY]
                                     [--ssh-user SSH_USER]
                                     [--tags TAGS]
                                     [--skip-tags SKIP_TAGS]
                                     [--stack STACK] [-e EXTRA_VARS]
```

Table 57.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--static-inventory STATIC_INVENTORY	Path to an existing ansible inventory to use. if not specified, one will be generated in ~/tripleo-ansible-inventory.yaml
--ssh-user SSH_USER	Deprecated: only tripleo-admin should be used as ssh user.
--tags TAGS	A string specifying the tag or comma separated list of tags to be passed as --tags to ansible-playbook.
--skip-tags SKIP_TAGS	A string specifying the tag or comma separated list of tags to be passed as --skip-tags to ansible-playbook.
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
-e EXTRA_VARS, --extra-vars EXTRA_VARS	Set additional variables as key=value or yaml/json

57.12. OVERCLOUD EXTERNAL-UPGRADE RUN

Run external major upgrade Ansible playbook This will run the external major upgrade Ansible playbook, executing tasks from the undercloud. The upgrade playbooks are made available after completion of the *overcloud upgrade prepare* command.

Usage:

```
openstack overcloud external-upgrade run [-h]
                                         [--static-inventory STATIC_INVENTORY]
                                         [--ssh-user SSH_USER]
                                         [--tags TAGS]
                                         [--skip-tags SKIP_TAGS]
                                         [--stack STACK]
                                         [-e EXTRA_VARS]
```

Table 57.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--static-inventory STATIC_INVENTORY	Path to an existing ansible inventory to use. if not specified, one will be generated in ~/tripleo-ansible-inventory.yaml
--ssh-user SSH_USER	Deprecated: only tripleo-admin should be used as ssh user.
--tags TAGS	A string specifying the tag or comma separated list of tags to be passed as --tags to ansible-playbook.
--skip-tags SKIP_TAGS	A string specifying the tag or comma separated list of tags to be passed as --skip-tags to ansible-playbook.
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
-e EXTRA_VARS, --extra-vars EXTRA_VARS	Set additional variables as key=value or yaml/json

57.13. OVERCLOUD FAILURES

Get deployment failures

Usage:

```
openstack overcloud failures [-h] [--plan PLAN]
```

Table 57.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--plan PLAN, --stack PLAN	Name of the stack/plan. (default: overcloud)

57.14. OVERCLOUD FFWD-UPGRADE CONVERGE

Converge the fast-forward upgrade on Overcloud Nodes This is the last step for completion of a fast forward upgrade. The main task is updating the plan and stack to unblock future stack updates. For the ffwd upgrade workflow we have set and used the config-download Software/Structured Deployment for the OS::TripleO and OS::Heat resources. This unsets those back to their default values.

Usage:

```

openstack overcloud ffwd-upgrade converge [--templates [TEMPLATES]]
    [--stack STACK]
    [--timeout <TIMEOUT>]
    [--control-scale CONTROL_SCALE]
    [--compute-scale COMPUTE_SCALE]
    [--ceph-storage-scale CEPH_STORAGE_SCALE]
    [--block-storage-scale BLOCK_STORAGE_SCALE]
    [--swift-storage-scale SWIFT_STORAGE_SCALE]
    [--control-flavor CONTROL_FLAVOR]
    [--compute-flavor COMPUTE_FLAVOR]
    [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
    [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
    [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup]
    [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]
    [--inflight-validations]
    [--dry-run]
    [--run-validations]
    [--skip-postconfig]
    [--force-postconfig]
    [--skip-deploy-identifier]
    [--rhel-reg]
    [--reg-method {satellite,portal}]
    [--reg-org REG_ORG]

```

```

[--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--no-config-download]
[--config-download-only]
[--output-dir OUTPUT_DIR]
[--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
[--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
[--deployment-python-interpreter
DEPLOYMENT_PYTHON_INTERPRETER]
[--yes]

```

Table 57.18. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--control-scale CONTROL_SCALE	New number of control nodes. (deprecated. use an environment file and set the parameter ControllerCount. It will be removed after the "P" release.)
--compute-scale COMPUTE_SCALE	New number of compute nodes. (deprecated. use an environment file and set the parameter ComputeCount. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)
--block-storage-scale BLOCK_STORAGE_SCALE	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter BlockStorageCount. It will be removed after the "P" release.)
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes. (deprecated. use an environment file and set the parameter ObjectStorageCount. It will be removed after the "P" release.)

Value	Summary
--control-flavor CONTROL_FLAVOR	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter OvercloudControlFlavor. It will be removed after the "P" release.)
--compute-flavor COMPUTE_FLAVOR	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter OvercloudComputeFlavor. It will be removed after the "P" release.)
--ceph-storage-flavor CEPH_STORAGE_FLAVOR	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter OvercloudCephStorageFlavor. It will be removed after the "P" release.)
--block-storage-flavor BLOCK_STORAGE_FLAVOR	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudBlockStorageFlavor. It will be removed after the "P" release.)
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter OvercloudSwiftStorageFlavor. It will be removed after the "P" release.)
--libvirt-type {kvm,qemu}	Libvirt domain type.
--ntp-server NTP_SERVER	The ntp for overcloud nodes.
--no-proxy NO_PROXY	A comma separated list of hosts that should not be proxied.
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to overcloud nodes
--overcloud-ssh-key OVERCLOUD_SSH_KEY	Key path for ssh access to overcloud nodes.
--overcloud-ssh-network OVERCLOUD_SSH_NETWORK	Network name to use for ssh access to overcloud nodes.
--environment-file <HEAT ENVIRONMENT FILE>, -e <HEAT ENVIRONMENT FILE>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
--environment-directory <HEAT ENVIRONMENT DIRECTORY>	Environment file directories that are automatically added to the heat stack-create or heat stack-update commands. Can be specified more than once. Files in directories are loaded in ascending sort order.

Value	Summary
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory. May be an absolute path or the path relative to <code>--templates</code>
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data.yaml</code> in the <code>--templates</code> directory
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.
<code>--disable-validations</code>	Deprecated. disable the pre-deployment validations entirely. These validations are the built-in pre-deployment validations. To enable external validations from <code>tripleo-validations</code> , use the <code>--run-validations</code> flag. These validations are now run via the external validations in <code>tripleo-validations</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--run-validations</code>	Run external validations from the <code>tripleo-validations</code> project.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.

Value	Summary
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--config-download</code>	Run deployment via config-download mechanism. this is now the default, and this CLI options may be removed in the future.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and associated OpenStack resources. No software configuration will be applied.
<code>--config-download-only</code>	Disable the stack create/update, and only run the config-download workflow to apply the software configuration.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used <code>(/var/lib/mistral/<execution id>)</code> .
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by config-download by default.
<code>--config-download-timeout</code> <code>CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for config-download steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.
<code>--deployment-python-interpreter</code> <code>DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.

Value	Summary
--yes	Use --yes to skip the confirmation required before any ffwd-upgrade operation. Use this with caution!

Table 57.19. Registration Parameters

Value	Summary
--rhel-reg	Register overcloud nodes to the customer portal or a satellite.
--reg-method {satellite,portal}	Rhel registration method to use for the overcloud nodes.
--reg-org REG_ORG	Organization key to use for registration.
--reg-force	Register the system even if it is already registered.
--reg-sat-url REG_SAT_URL	Satellite server to register overcloud nodes.
--reg-activation-key REG_ACTIVATION_KEY	Activation key to use for registration.

57.15. OVERCLOUD FFWD-UPGRADE PREPARE

Run heat stack update for overcloud nodes to refresh heat stack outputs. The heat stack outputs are what we use later on to generate ansible playbooks which deliver the ffwd upgrade workflow. This is used as the first step for a fast forward upgrade of your overcloud.

Usage:

```
openstack overcloud ffwd-upgrade prepare [--templates [TEMPLATES]]
                                     [--stack STACK]
                                     [--timeout <TIMEOUT>]
                                     [--control-scale CONTROL_SCALE]
                                     [--compute-scale COMPUTE_SCALE]
                                     [--ceph-storage-scale CEPH_STORAGE_SCALE]
                                     [--block-storage-scale BLOCK_STORAGE_SCALE]
                                     [--swift-storage-scale SWIFT_STORAGE_SCALE]
                                     [--control-flavor CONTROL_FLAVOR]
                                     [--compute-flavor COMPUTE_FLAVOR]
                                     [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
                                     [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
                                     [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
                                     [--libvirt-type {kvm,qemu}]
```

```

[--ntp-server NTP_SERVER]
[--no-proxy NO_PROXY]
[--overcloud-ssh-user OVERCLOUD_SSH_USER]
[--overcloud-ssh-key OVERCLOUD_SSH_KEY]
[--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
[--environment-file <HEAT ENVIRONMENT FILE>]
[--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
[--roles-file ROLES_FILE]
[--networks-file NETWORKS_FILE]
[--plan-environment-file PLAN_ENVIRONMENT_FILE]
[--no-cleanup]
[--update-plan-only]
[--validation-errors-nonfatal]
[--validation-warnings-fatal]
[--disable-validations]
[--inflight-validations]
[--dry-run]
[--run-validations]
[--skip-postconfig]
[--force-postconfig]
[--skip-deploy-identifier]
[--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG]
[--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--no-config-download]
[--config-download-only]
[--output-dir OUTPUT_DIR]
[--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
[--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
[--deployment-python-interpreter
DEPLOYMENT_PYTHON_INTERPRETER]
[--yes]

```

Table 57.20. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.

Value	Summary
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes. (deprecated. use an environment file and set the parameter <code>ControllerCount</code> . It will be removed after the "P" release.)
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes. (deprecated. use an environment file and set the parameter <code>ComputeCount</code> . It will be removed after the "P" release.)
<code>--ceph-storage-scale CEPH_STORAGE_SCALE</code>	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter <code>CephStorageCount</code> . It will be removed after the "P" release.)
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter <code>BlockStorageCount</code> . It will be removed after the "P" release.)
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudSwiftStorageFlavor</code> . It will be removed after the "P" release.)

Value	Summary
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--overcloud-ssh-network OVERCLOUD_SSH_NETWORK</code>	Network name to use for ssh access to overcloud nodes.
<code>--environment-file <HEAT ENVIRONMENT FILE>, -e <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--environment-directory <HEAT ENVIRONMENT DIRECTORY></code>	Environment file directories that are automatically added to the heat stack-create or heat stack-update commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default roles_data.yaml in the --templates directory. May be an absolute path or the path relative to --templates
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default network_data.yaml in the --templates directory
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default plan-environment.yaml in the --templates directory
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.

Value	Summary
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.
<code>--disable-validations</code>	Deprecated. disable the pre-deployment validations entirely. These validations are the built-in pre-deployment validations. To enable external validations from tripleo-validations, use the <code>--run-validations</code> flag. These validations are now run via the external validations in tripleo-validations.
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .

Value	Summary
<code>--config-download</code>	Run deployment via config-download mechanism. this is now the default, and this CLI options may be removed in the future.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and associated OpenStack resources. No software configuration will be applied.
<code>--config-download-only</code>	Disable the stack create/update, and only run the config-download workflow to apply the software configuration.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used <code>(/var/lib/mistral/<execution id>)</code> .
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by config-download by default.
<code>--config-download-timeout</code> <code>CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for config-download steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.
<code>--deployment-python-interpreter</code> <code>DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
<code>--yes</code>	Use <code>--yes</code> to skip the confirmation required before any <code>ffwd-upgrade</code> operation. Use this with caution!

Table 57.21. Registration Parameters

Value	Summary
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.

Value	Summary
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.

57.16. OVERCLOUD FFWD-UPGRADE RUN

Run fast forward upgrade ansible playbooks on Overcloud nodes This will run the `fast_forward_upgrade_playbook.yaml` ansible playbook. This playbook was generated when you ran the `ffwd-upgrade prepare` command. Running `'ffwd-upgrade run '` is the second step in the `ffwd` upgrade workflow.

Usage:

```
openstack overcloud ffwd-upgrade run [-h] [--yes]
                                     [--static-inventory STATIC_INVENTORY]
                                     [--ssh-user SSH_USER]
                                     [--stack STACK]
```

Table 57.22. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--yes</code>	Use <code>--yes</code> to skip the confirmation required before any <code>ffwd-upgrade</code> operation. Use this with caution!
<code>--static-inventory STATIC_INVENTORY</code>	Path to an existing ansible inventory to use. if not specified, one will be generated in <code>~/tripleo-ansible-inventory.yaml</code>
<code>--ssh-user SSH_USER</code>	Deprecated: only <code>tripleo-admin</code> should be used as ssh user.
<code>--stack STACK</code>	Name or id of heat stack (default= <code>env: OVERCLOUD_STACK_NAME</code>)

57.17. OVERCLOUD GENERATE FENCING

Generate fencing parameters

Usage:

```
openstack overcloud generate fencing [-h] [-a FENCE_ACTION]
                                     [--delay DELAY] [--ipmi-lanplus]
```



```

[--ipmi-no-lanplus]
[--ipmi-cipher IPMI_CIPHER]
[--ipmi-level IPMI_LEVEL]
[--output OUTPUT]
instackenv

```

Table 57.23. Positional Arguments

Value	Summary
instackenv	None

Table 57.24. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-a FENCE_ACTION, --action FENCE_ACTION	Deprecated: this option is ignored.
--delay DELAY	Wait delay seconds before fencing is started
--ipmi-lanplus	Deprecated: this is the default.
--ipmi-no-lanplus	Do not use lanplus. defaults to: false
--ipmi-cipher IPMI_CIPHER	Ciphersuite to use (same as ipmitool -c parameter.
--ipmi-level IPMI_LEVEL	Privileged level on ipmi device. valid levels: callback, user, operator, administrator.
--output OUTPUT	Write parameters to a file

57.18. OVERCLOUD IMAGE BUILD

Build images for the overcloud

Usage:

```

openstack overcloud image build [-h] [--config-file <yaml config file>]
                                [--image-name <image name>] [--no-skip]
                                [--output-directory OUTPUT_DIRECTORY]

```

Table 57.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--config-file <yaml config file></code>	Yaml config file specifying the image build. may be specified multiple times. Order is preserved, and later files will override some options in previous files. Other options will append.
<code>--image-name <image name></code>	Name of image to build. may be specified multiple times. If unspecified, will build all images in given YAML files.
<code>--no-skip</code>	Skip build if cached image exists.
<code>--output-directory OUTPUT_DIRECTORY</code>	Output directory for images. defaults to \$TRIPLEO_ROOT, or current directory if unset.

57.19. OVERCLOUD IMAGE UPLOAD

Create overcloud glance images from existing image files.

Usage:

```
openstack overcloud image upload [-h] [--image-path IMAGE_PATH]
                                [--os-image-name OS_IMAGE_NAME]
                                [--ironic-python-agent-name IPA_NAME]
                                [--http-boot HTTP_BOOT]
                                [--update-existing] [--whole-disk]
                                [--architecture ARCHITECTURE]
                                [--platform PLATFORM]
                                [--image-type {os,ironic-python-agent}]
                                [--progress]
```

Table 57.26. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--image-path IMAGE_PATH</code>	Path to directory containing image files
<code>--os-image-name OS_IMAGE_NAME</code>	Openstack disk image filename
<code>--ironic-python-agent-name IPA_NAME</code>	Openstack ironic-python-agent (agent) image filename
<code>--http-boot HTTP_BOOT</code>	Root directory for the introspection image
<code>--update-existing</code>	Update images if already exist

Value	Summary
<code>--whole-disk</code>	When set, the overcloud-full image to be uploaded will be considered as a whole disk one
<code>--architecture ARCHITECTURE</code>	Architecture type for these images, <i>x86_64</i> , <i>i386</i> and <i>ppc64le</i> are common options. This option should match at least one <i>arch</i> value in <i>instackenv.json</i>
<code>--platform PLATFORM</code>	Platform type for these images. platform is a sub-category of architecture. For example you may have generic images for <i>x86_64</i> but offer images specific to SandyBridge (SNB).
<code>--image-type {os,ironic-python-agent}</code>	If specified, allows to restrict the image type to upload (os for the overcloud image or ironic-python-agent for the ironic-python-agent one)
<code>--progress</code>	Show progress bar for upload files action

57.20. OVERCLOUD NETENV VALIDATE

Validate the network environment file.

Usage:

```
openstack overcloud netenv validate [-h] [-f NETENV]
```

Table 57.27. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>-f NETENV, --file NETENV</code>	Path to the network environment file

57.21. OVERCLOUD NODE BIOS CONFIGURE

Apply BIOS configuration on given nodes

Usage:

```
openstack overcloud node bios configure [-h] [--all-manageable]
                                         [--configuration <configuration>]
                                         [<node_uuid> [<node_uuid> ...]]
```

Table 57.28. Positional Arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to configure bios

Table 57.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-manageable	Configure bios for all nodes currently in <i>manageable</i> state
--configuration <configuration>	Bios configuration (yaml/json string or file name).

57.22. OVERCLOUD NODE BIOS RESET

Reset BIOS configuration to factory default

Usage:

```
openstack overcloud node bios reset [-h] [--all-manageable]
                                     [<node_uuid> [<node_uuid> ...]]
```

Table 57.30. Positional Arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to reset bios

Table 57.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-manageable	Reset bios on all nodes currently in <i>manageable</i> state

57.23. OVERCLOUD NODE CLEAN

Run node(s) through cleaning.

Usage:

```
openstack overcloud node clean [-h] [--all-manageable] [--provide]
                                [<node_uuid> [<node_uuid> ...]]
```

Table 57.32. Positional Arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be cleaned

Table 57.33. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-manageable	Clean all nodes currently in <i>manageable</i> state
--provide	Provide (make available) the nodes once cleaned

57.24. OVERCLOUD NODE CONFIGURE

Configure Node boot options.

Usage:

```
openstack overcloud node configure [-h] [--all-manageable]
    [--deploy-kernel DEPLOY_KERNEL]
    [--deploy-ramdisk DEPLOY_RAMDISK]
    [--instance-boot-option {local,netboot}]
    [--root-device ROOT_DEVICE]
    [--root-device-minimum-size ROOT_DEVICE_MINIMUM_SIZE]
    [--overwrite-root-device-hints]
    [<node_uuid> [<node_uuid> ...]]
```

Table 57.34. Positional Arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be configured

Table 57.35. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-manageable	Configure all nodes currently in <i>manageable</i> state
--deploy-kernel DEPLOY_KERNEL	Image with deploy kernel.

Value	Summary
<code>--deploy-ramdisk DEPLOY_RAMDISK</code>	Image with deploy ramdisk.
<code>--instance-boot-option {local,netboot}</code>	Whether to set instances for booting from local hard drive (local) or network (netboot).
<code>--root-device ROOT_DEVICE</code>	Define the root device for nodes. can be either a list of device names (without /dev) to choose from or one of two strategies: largest or smallest. For it to work this command should be run after the introspection.
<code>--root-device-minimum-size ROOT_DEVICE_MINIMUM_SIZE</code>	Minimum size (in gib) of the detected root device. Used with <code>--root-device</code> .
<code>--overwrite-root-device-hints</code>	Whether to overwrite existing root device hints when <code>--root-device</code> is used.

57.25. OVERCLOUD NODE DELETE

Delete overcloud nodes.

Usage:

```
openstack overcloud node delete [-h] [--stack STACK]
                               [--templates [TEMPLATES]]
                               [-e <HEAT ENVIRONMENT FILE>]
                               [--timeout <TIMEOUT>]
                               <node> [<node> ...]
```

Table 57.36. Positional Arguments

Value	Summary
<code><node></code>	Node id(s) to delete

Table 57.37. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--stack STACK</code>	Name or id of heat stack to scale (default=env: OVERCLOUD_STACK_NAME)

Value	Summary
<code>--templates [TEMPLATES]</code>	The directory containing the heat templates to deploy. This argument is deprecated. The command now utilizes a deployment plan, which should be updated prior to running this command, should that be required. Otherwise this argument will be silently ignored.
<code>-e <HEAT ENVIRONMENT FILE>, --environment-file <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.) This argument is deprecated. The command now utilizes a deployment plan, which should be updated prior to running this command, should that be required. Otherwise this argument will be silently ignored.
<code>--timeout <TIMEOUT></code>	Timeout in minutes to wait for the nodes to be deleted. Keep in mind that due to keystone session duration that timeout has an upper bound of 4 hours

57.26. OVERCLOUD NODE DISCOVER

Discover overcloud nodes by polling their BMCs.

Usage:

```
openstack overcloud node discover [-h] (--ip <ips> | --range <range>)
                                --credentials <key:value>
                                [--port <ports>] [--introspect]
                                [--run-validations] [--provide]
                                [--no-deploy-image]
                                [--instance-boot-option {local,netboot}]
```

Table 57.38. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--ip <ips></code>	Ip address(es) to probe
<code>--range <range></code>	Ip range to probe
<code>--credentials <key:value></code>	Key/value pairs of possible credentials
<code>--port <ports></code>	Bmc port(s) to probe
<code>--introspect</code>	Introspect the imported nodes

Value	Summary
<code>--run-validations</code>	Run the pre-deployment validations. these external validations are from the TripleO Validations project.
<code>--provide</code>	Provide (make available) the nodes
<code>--no-deploy-image</code>	Skip setting the deploy kernel and ramdisk.
<code>--instance-boot-option {local,netboot}</code>	Whether to set instances for booting from local hard drive (local) or network (netboot).

57.27. OVERCLOUD NODE IMPORT

Import baremetal nodes from a JSON, YAML or CSV file. The node status will be set to *manageable* by default.

Usage:

```
openstack overcloud node import [-h] [--introspect] [--run-validations]
                                [--validate-only] [--provide]
                                [--no-deploy-image]
                                [--instance-boot-option {local,netboot}]
                                env_file
```

Table 57.39. Positional Arguments

Value	Summary
<code>env_file</code>	None

Table 57.40. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--introspect</code>	Introspect the imported nodes
<code>--run-validations</code>	Run the pre-deployment validations. these external validations are from the TripleO Validations project.
<code>--validate-only</code>	Validate the <code>env_file</code> and then exit without actually importing the nodes.
<code>--provide</code>	Provide (make available) the nodes
<code>--no-deploy-image</code>	Skip setting the deploy kernel and ramdisk.

Value	Summary
<code>--instance-boot-option {local,netboot}</code>	Whether to set instances for booting from local hard drive (local) or network (netboot).

57.28. OVERCLOUD NODE INTROSPECT

Introspect specified nodes or all nodes in *manageable* state.

Usage:

```
openstack overcloud node introspect [-h] [--all-manageable] [--provide]
                                     [--run-validations]
                                     [<node_uuid> [<node_uuid> ...]]
```

Table 57.41. Positional Arguments

Value	Summary
<code><node_uuid></code>	Baremetal node uuids for the node(s) to be introspected

Table 57.42. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-manageable</code>	Introspect all nodes currently in <i>manageable</i> state
<code>--provide</code>	Provide (make available) the nodes once introspected
<code>--run-validations</code>	Run the pre-deployment validations. these external validations are from the TripleO Validations project.

57.29. OVERCLOUD NODE PROVIDE

Mark nodes as available based on UUIDs or current *manageable* state.

Usage:

```
openstack overcloud node provide [-h] [--all-manageable]
                                   [<node_uuid> [<node_uuid> ...]]
```

Table 57.43. Positional Arguments

Value	Summary
<node_uuid>	Baremetal node uuids for the node(s) to be provided

Table 57.44. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-manageable	Provide all nodes currently in <i>manageable</i> state

57.30. OVERCLOUD NODE PROVISION

Provision a new node using Ironic.

Usage:

```

openstack overcloud node provision [-h] [-o OUTPUT] [--stack STACK]
                                   [--overcloud-ssh-user OVERCLOUD_SSH_USER]
                                   [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
                                   <baremetal_deployment.yaml>

```

Table 57.45. Positional Arguments

Value	Summary
<baremetal_deployment.yaml>	Configuration file describing the baremetal deployment

Table 57.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-o OUTPUT, --output OUTPUT	The output environment file path
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)
--overcloud-ssh-user OVERCLOUD_SSH_USER	User for ssh access to newly deployed nodes
--overcloud-ssh-key OVERCLOUD_SSH_KEY	Public key path for ssh access to newly deployed nodes

57.31. OVERCLOUD PARAMETERS SET

Set a parameters for a plan

Usage:

```
openstack overcloud parameters set [-h] name file_in
```

Table 57.47. Positional Arguments

Value	Summary
name	The name of the plan, which is used for the swift container, Mistral environment and Heat stack names.
file_in	None

Table 57.48. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

57.32. OVERCLOUD PLAN CREATE

Create a deployment plan

Usage:

```
openstack overcloud plan create [-h] [--templates TEMPLATES]
                                [--plan-environment-file PLAN_ENVIRONMENT_FILE]
                                [--disable-password-generation]
                                [--source-url SOURCE_URL]
                                name
```

Table 57.49. Positional Arguments

Value	Summary
name	The name of the plan, which is used for the object storage container, workflow environment and orchestration stack names.

Table 57.50. Optional Arguments

Value	Summary
-------	---------

Value	Summary
-h, --help	Show this help message and exit
--templates TEMPLATES	The directory containing the heat templates to deploy. If this or --source_url isn't provided, the templates packaged on the Undercloud will be used.
--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE	Plan environment file, overrides the default plan-environment.yaml in the --templates directory
--disable-password-generation	Disable password generation.
--source-url SOURCE_URL	The url of a git repository containing the heat templates to deploy. If this or --templates isn't provided, the templates packaged on the Undercloud will be used.

57.33. OVERCLOUD PLAN DELETE

Delete an overcloud deployment plan. The plan will not be deleted if a stack exists with the same name.

Usage:

```
openstack overcloud plan delete [-h] <name> [<name> ...]
```

Table 57.51. Positional Arguments

Value	Summary
<name>	Name of the plan(s) to delete

Table 57.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

57.34. OVERCLOUD PLAN DEPLOY

Deploy a deployment plan

Usage:

```
openstack overcloud plan deploy [-h] [--timeout <TIMEOUT>]
                                [--run-validations]
                                name
```

Table 57.53. Positional Arguments

Value	Summary
name	The name of the plan to deploy.

Table 57.54. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--run-validations	Run the pre-deployment validations. these external validations are from the TripleO Validations project.

57.35. OVERCLOUD PLAN EXPORT

Export a deployment plan

Usage:

```
openstack overcloud plan export [-h] [--output-file <output file>]
                                [--force-overwrite]
                                <name>
```

Table 57.55. Positional Arguments

Value	Summary
<name>	Name of the plan to export.

Table 57.56. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--output-file <output file>, -o <output file>	Name of the output file for export. it will default to "<name>.tar.gz".
--force-overwrite, -f	Overwrite output file if it exists.

57.36. OVERCLOUD PLAN LIST

List overcloud deployment plans.

Usage:

```

openstack overcloud plan list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]

```

Table 57.57. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 57.58. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 57.59. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 57.60. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 57.61. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

57.37. OVERCLOUD PROFILES LIST

List overcloud node profiles

Usage:

```
openstack overcloud profiles list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN] [--all]
                                [--control-scale CONTROL_SCALE]
                                [--compute-scale COMPUTE_SCALE]
                                [--ceph-storage-scale CEPH_STORAGE_SCALE]
                                [--block-storage-scale BLOCK_STORAGE_SCALE]
                                [--swift-storage-scale SWIFT_STORAGE_SCALE]
                                [--control-flavor CONTROL_FLAVOR]
                                [--compute-flavor COMPUTE_FLAVOR]
                                [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
                                [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
                                [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
```

Table 57.62. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all	List all nodes, even those not available to nova.
--control-scale CONTROL_SCALE	New number of control nodes.
--compute-scale COMPUTE_SCALE	New number of compute nodes.
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes.
--block-storage-scale BLOCK_STORAGE_SCALE	New number of cinder storage nodes.
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes.

Value	Summary
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes.
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes.
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes.
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes

Table 57.63. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 57.64. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 57.65. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 57.66. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

57.38. OVERCLOUD PROFILES MATCH

Assign and validate profiles on nodes

Usage:

```

openstack overcloud profiles match [-h] [--dry-run]
                                [--control-scale CONTROL_SCALE]
                                [--compute-scale COMPUTE_SCALE]
                                [--ceph-storage-scale CEPH_STORAGE_SCALE]
                                [--block-storage-scale BLOCK_STORAGE_SCALE]
                                [--swift-storage-scale SWIFT_STORAGE_SCALE]
                                [--control-flavor CONTROL_FLAVOR]
                                [--compute-flavor COMPUTE_FLAVOR]
                                [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
                                [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
                                [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]

```

Table 57.67. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes.
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes.
<code>--ceph-storage-scale CEPH_STORAGE_SCALE</code>	New number of ceph storage nodes.
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes.
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes.
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes.
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes.

Value	Summary
--ceph-storage-flavor CEPH_STORAGE_FLAVOR	Nova flavor to use for ceph storage nodes.
--block-storage-flavor BLOCK_STORAGE_FLAVOR	Nova flavor to use for cinder storage nodes
--swift-storage-flavor SWIFT_STORAGE_FLAVOR	Nova flavor to use for swift storage nodes

57.39. OVERCLOUD RAID CREATE

Create RAID on given nodes

Usage:

```
openstack overcloud raid create [-h] --node NODE configuration
```

Table 57.68. Positional Arguments

Value	Summary
configuration	Raid configuration (yaml/json string or file name).

Table 57.69. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--node NODE	Nodes to create raid on (expected to be in manageable state). Can be specified multiple times.

57.40. OVERCLOUD ROLE LIST

List available roles (DEPRECATED). Please use "openstack overcloud roles list" instead.

Usage:

```
openstack overcloud role list [-h] [--roles-path <roles directory>]
```

Table 57.70. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--roles-path <roles directory></code>	Filesystem path containing the role yaml files. by default this is <code>/usr/share/openstack-tripleo-heat-templates/roles</code>

57.41. OVERCLOUD ROLE SHOW

Show information about a given role (DEPRECATED). Please use "openstack overcloud roles show" instead.

Usage:

```
openstack overcloud role show [-h] [--roles-path <roles directory>]
                               <role>
```

Table 57.71. Positional Arguments

Value	Summary
<code><role></code>	Role to display more information about.

Table 57.72. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--roles-path <roles directory></code>	Filesystem path containing the role yaml files. by default this is <code>/usr/share/openstack-tripleo-heat-templates/roles</code>

57.42. OVERCLOUD ROLES GENERATE

Generate `roles_data.yaml` file

Usage:

```
openstack overcloud roles generate [-h]
                                   [--roles-path <roles directory>]
                                   [-o <output file>] [--skip-validate]
                                   <role> [<role> ...]
```

Table 57.73. Positional Arguments

Value	Summary
<role>	List of roles to use to generate the roles_data.yaml file for the deployment. NOTE: Ordering is important if no role has the "primary" and "controller" tags. If no role is tagged then the first role listed will be considered the primary role. This usually is the controller role.

Table 57.74. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--roles-path <roles directory>	Filesystem path containing the role yaml files. by default this is /usr/share/openstack-tripleo-heat-templates/roles
-o <output file>, --output-file <output file>	File to capture all output to. for example, roles_data.yaml
--skip-validate	Skip role metadata type validation whengenerating the roles_data.yaml

57.43. OVERCLOUD ROLES LIST

List the current and available roles in a given plan

Usage:

```
openstack overcloud roles list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--name NAME] [--detail] [--current]
```

Table 57.75. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	The name of the plan, which is used for the object storage container, workflow environment and orchestration stack names.

Value	Summary
<code>--detail</code>	Include details about each role
<code>--current</code>	Only show the information for the roles currently enabled for the plan.

Table 57.76. Output Formatters

Value	Summary
output formatter options- <code>f</code> { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN</code> , <code>--column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 57.77. CSV Formatter

Value	Summary
<code>--quote</code> { <code>all,minimal,none,nonnumeric</code> }	When to include quotes, defaults to nonnumeric

Table 57.78. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 57.79. Table Formatter

Value	Summary
<code>--max-width</code> <integer>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

57.44. OVERCLOUD ROLES SHOW

Show details for a specific role, given a plan

Usage:

```
openstack overcloud roles show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--name NAME]
                               <role>
```

Table 57.80. Positional Arguments

Value	Summary
<role>	Name of the role to look up.

Table 57.81. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	The name of the plan, which is used for the object storage container, workflow environment and orchestration stack names.

Table 57.82. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 57.83. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 57.84. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 57.85. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

57.45. OVERCLOUD STATUS

Get deployment status

Usage:

```
openstack overcloud status [-h] [--plan PLAN]
```

Table 57.86. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--plan PLAN, --stack PLAN	Name of the stack/plan. (default: overcloud)

57.46. OVERCLOUD SUPPORT REPORT COLLECT

Run sosreport on selected servers.

Usage:

```
openstack overcloud support report collect [-h] [-c CONTAINER]
                                         [-o DESTINATION]
                                         [--skip-container-delete]
                                         [-t TIMEOUT]
                                         [-n CONCURRENCY]
                                         [--collect-only | --download-only]
                                         server_name
```

Table 57.87. Positional Arguments

Value	Summary
server_name	Nova server_name or partial name to match. for example "controller" will match all controllers for an environment.

Table 57.88. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-c CONTAINER, --container CONTAINER	Swift container to store logs to
-o DESTINATION, --output DESTINATION	Output directory for the report
--skip-container-delete	Do not delete the container after the files have been downloaded. Ignored if --collect-only or --download-only is provided.
-t TIMEOUT, --timeout TIMEOUT	Maximum time to wait for the log collection and container deletion workflows to finish.
-n CONCURRENCY, --concurrency CONCURRENCY	Number of parallel log collection and object deletion tasks to run.
--collect-only	Skip log downloads, only collect logs and put in the container
--download-only	Skip generation, only download from the provided container

57.47. OVERCLOUD UPDATE CONVERGE

Converge the update on Overcloud nodes. This restores the plan and stack so that normal deployment workflow is back in place.

Usage:

```
openstack overcloud update converge [--templates [TEMPLATES]]
                                   [--stack STACK]
                                   [--timeout <TIMEOUT>]
                                   [--control-scale CONTROL_SCALE]
                                   [--compute-scale COMPUTE_SCALE]
                                   [--ceph-storage-scale CEPH_STORAGE_SCALE]
                                   [--block-storage-scale BLOCK_STORAGE_SCALE]
                                   [--swift-storage-scale SWIFT_STORAGE_SCALE]
                                   [--control-flavor CONTROL_FLAVOR]
```



```

[--compute-flavor COMPUTE_FLAVOR]
[--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
[--block-storage-flavor BLOCK_STORAGE_FLAVOR]
[--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
[--libvirt-type {kvm,qemu}]
[--ntp-server NTP_SERVER]
[--no-proxy NO_PROXY]
[--overcloud-ssh-user OVERCLOUD_SSH_USER]
[--overcloud-ssh-key OVERCLOUD_SSH_KEY]
[--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
[--environment-file <HEAT ENVIRONMENT FILE>]
[--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
[--roles-file ROLES_FILE]
[--networks-file NETWORKS_FILE]
[--plan-environment-file PLAN_ENVIRONMENT_FILE]
[--no-cleanup] [--update-plan-only]
[--validation-errors-nonfatal]
[--validation-warnings-fatal]
[--disable-validations]
[--inflight-validations]
[--dry-run] [--run-validations]
[--skip-postconfig]
[--force-postconfig]
[--skip-deploy-identifier]
[--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG] [--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--no-config-download]
[--config-download-only]
[--output-dir OUTPUT_DIR]
[--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
[--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
[--deployment-python-interpreter
DEPLOYMENT_PYTHON_INTERPRETER]

```

Table 57.89. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.

Value	Summary
<code>--control-scale CONTROL_SCALE</code>	New number of control nodes. (deprecated. use an environment file and set the parameter <code>ControllerCount</code> . It will be removed after the "P" release.)
<code>--compute-scale COMPUTE_SCALE</code>	New number of compute nodes. (deprecated. use an environment file and set the parameter <code>ComputeCount</code> . It will be removed after the "P" release.)
<code>--ceph-storage-scale CEPH_STORAGE_SCALE</code>	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter <code>CephStorageCount</code> . It will be removed after the "P" release.)
<code>--block-storage-scale BLOCK_STORAGE_SCALE</code>	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter <code>BlockStorageCount</code> . It will be removed after the "P" release.)
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)

Value	Summary
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudSwiftStorageFlavor</code> . It will be removed after the "P" release.)
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--overcloud-ssh-network OVERCLOUD_SSH_NETWORK</code>	Network name to use for ssh access to overcloud nodes.
<code>--environment-file <HEAT ENVIRONMENT FILE>, -e <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--environment-directory <HEAT ENVIRONMENT DIRECTORY></code>	Environment file directories that are automatically added to the heat stack-create or heat stack-update commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory. May be an absolute path or the path relative to <code>--templates</code>
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data.yaml</code> in the <code>--templates</code> directory
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.

Value	Summary
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.
<code>--disable-validations</code>	Deprecated. disable the pre-deployment validations entirely. These validations are the built-in pre-deployment validations. To enable external validations from tripleo-validations, use the <code>--run-validations</code> flag. These validations are now run via the external validations in tripleo-validations.
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--run-validations</code>	Run external validations from the tripleo-validations project.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .

Value	Summary
<code>--config-download</code>	Run deployment via config-download mechanism. this is now the default, and this CLI options may be removed in the future.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and associated OpenStack resources. No software configuration will be applied.
<code>--config-download-only</code>	Disable the stack create/update, and only run the config-download workflow to apply the software configuration.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used <code>(/var/lib/mistral/<execution id>)</code> .
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by config-download by default.
<code>--config-download-timeout</code> <code>CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for config-download steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.
<code>--deployment-python-interpreter</code> <code>DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.

Table 57.90. Registration Parameters

Value	Summary
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.

Value	Summary
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.

57.48. OVERCLOUD UPDATE PREPARE

Run heat stack update for overcloud nodes to refresh heat stack outputs. The heat stack outputs are what we use later on to generate ansible playbooks which deliver the minor update workflow. This is used as the first step for a minor update of your overcloud.

Usage:

```

openstack overcloud update prepare [--templates [TEMPLATES]]
    [--stack STACK]
    [--timeout <TIMEOUT>]
    [--control-scale CONTROL_SCALE]
    [--compute-scale COMPUTE_SCALE]
    [--ceph-storage-scale CEPH_STORAGE_SCALE]
    [--block-storage-scale BLOCK_STORAGE_SCALE]
    [--swift-storage-scale SWIFT_STORAGE_SCALE]
    [--control-flavor CONTROL_FLAVOR]
    [--compute-flavor COMPUTE_FLAVOR]
    [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
    [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
    [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup] [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]
    [--inflight-validations] [--dry-run]
    [--run-validations]
    [--skip-postconfig]
    [--force-postconfig]
    [--skip-deploy-identifier]
    [--rhel-reg]
    [--reg-method {satellite,portal}]
    [--reg-org REG_ORG] [--reg-force]
    [--reg-sat-url REG_SAT_URL]
    [--reg-activation-key REG_ACTIVATION_KEY]
    [--answers-file ANSWERS_FILE]
    [--disable-password-generation]
    [--deployed-server]
    [--config-download]

```

```

[--no-config-download]
[--config-download-only]
[--output-dir OUTPUT_DIR]
[--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
[--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
[--deployment-python-interpreter
DEPLOYMENT_PYTHON_INTERPRETER]

```

Table 57.91. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--control-scale CONTROL_SCALE	New number of control nodes. (deprecated. use an environment file and set the parameter ControllerCount. It will be removed after the "P" release.)
--compute-scale COMPUTE_SCALE	New number of compute nodes. (deprecated. use an environment file and set the parameter ComputeCount. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)
--block-storage-scale BLOCK_STORAGE_SCALE	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter BlockStorageCount. It will be removed after the "P" release.)
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes. (deprecated. use an environment file and set the parameter ObjectStorageCount. It will be removed after the "P" release.)
--control-flavor CONTROL_FLAVOR	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter OvercloudControlFlavor. It will be removed after the "P" release.)

Value	Summary
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudSwiftStorageFlavor</code> . It will be removed after the "P" release.)
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--overcloud-ssh-network OVERCLOUD_SSH_NETWORK</code>	Network name to use for ssh access to overcloud nodes.
<code>--environment-file <HEAT ENVIRONMENT FILE>, -e <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the <code>heat stack-create</code> or <code>heat stack-update</code> command. (Can be specified more than once.)
<code>--environment-directory <HEAT ENVIRONMENT DIRECTORY></code>	Environment file directories that are automatically added to the <code>heat stack-create</code> or <code>heat stack-update</code> commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory. May be an absolute path or the path relative to <code>--templates</code>

Value	Summary
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data.yaml</code> in the <code>--templates</code> directory
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.
<code>--disable-validations</code>	Deprecated. disable the pre-deployment validations entirely. These validations are the built-in pre-deployment validations. To enable external validations from <code>tripleo-validations</code> , use the <code>--run-validations</code> flag. These validations are now run via the external validations in <code>tripleo-validations</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--run-validations</code>	Run external validations from the <code>tripleo-validations</code> project.
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.

Value	Summary
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal, compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--config-download</code>	Run deployment via config-download mechanism. this is now the default, and this CLI options may be removed in the future.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and associated OpenStack resources. No software configuration will be applied.
<code>--config-download-only</code>	Disable the stack create/update, and only run the config-download workflow to apply the software configuration.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used (<code>/var/lib/mistral/<execution id></code>).
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by config-download by default.
<code>--config-download-timeout</code> <code>CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for config-download steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.

Value	Summary
<code>--deployment-python-interpreter</code> <code>DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.

Table 57.92. Registration Parameters

Value	Summary
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.

57.49. OVERCLOUD UPDATE RUN

Run minor update ansible playbooks on Overcloud nodes

Usage:

```

openstack overcloud update run [-h]
                               (--nodes NODES | --roles ROLES | --limit LIMIT)
                               [--playbook PLAYBOOK]
                               [--ssh-user SSH_USER]
                               [--static-inventory STATIC_INVENTORY]
                               [--stack STACK]

```

Table 57.93. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--nodes NODES</code>	Deprecated: this option will be remove in the future release Use the limit option instead.A string that identifies a single node or comma-separated list of nodes to be upgraded in parallel in this upgrade run invocation. For example: <code>--nodes "compute-0, compute-1, compute-5"</code> . NOTE: Using this parameter with nodes of controlplane roles (e.g. <code>--nodes controller-1"</code>) is NOT supported and WILL end badly unless you include ALL nodes of that role as a comma separated string. You should instead use the <code>--roles</code> parameter for controlplane roles and specify the role name.
<code>--roles ROLES</code>	Deprecated: this option will be remove in the future release Use the limit option instead.A string that identifies the role or comma-separated list of roles to be upgraded in this upgrade run invocation. NOTE: nodes of specified role(s) are upgraded in parallel. This is REQUIRED for controlplane roles. For non controlplane roles (e.g., "Compute"), you may consider instead using the <code>--nodes</code> argument to limit the upgrade to a specific node or list (comma separated string) of nodes.
<code>--limit LIMIT</code>	A string that identifies a single node or comma-separated list of nodes to be upgraded in parallel in this upgrade run invocation. For example: <code>--limit "compute-0, compute-1, compute-5"</code> .
<code>--playbook PLAYBOOK</code>	Ansible playbook to use for the minor update. defaults to the special value <i>all</i> which causes all the update playbooks to be executed. That is the <code>update_steps_playbook.yaml</code> and then <code>thedeploy_steps_playbook.yaml</code> . Set this to each of those playbooks in consecutive invocations of this command if you prefer to run them manually. Note: make sure to run both those playbooks so that all services are updated and running with the target version configuration.
<code>--ssh-user SSH_USER</code>	Deprecated: only <code>tripleo-admin</code> should be used as ssh user.
<code>--static-inventory STATIC_INVENTORY</code>	Path to an existing ansible inventory to use. if not specified, one will be generated in <code>~/tripleo-ansible-inventory.yaml</code>
<code>--stack STACK</code>	Name or id of heat stack (default= <code>env: OVERCLOUD_STACK_NAME</code>)

57.50. OVERCLOUD UPGRADE CONVERGE

Major upgrade converge - reset Heat resources in the stored plan This is the last step for completion of a overcloud major upgrade. The main task is updating the plan and stack to unblock future stack updates. For the major upgrade workflow we have set specific values for some stack Heat resources. This unsets those back to their default values.

Usage:

```
openstack overcloud upgrade converge [--templates [TEMPLATES]]
  [--stack STACK]
  [--timeout <TIMEOUT>]
  [--control-scale CONTROL_SCALE]
  [--compute-scale COMPUTE_SCALE]
  [--ceph-storage-scale CEPH_STORAGE_SCALE]
  [--block-storage-scale BLOCK_STORAGE_SCALE]
  [--swift-storage-scale SWIFT_STORAGE_SCALE]
  [--control-flavor CONTROL_FLAVOR]
  [--compute-flavor COMPUTE_FLAVOR]
  [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
  [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
  [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
  [--libvirt-type {kvm,qemu}]
  [--ntp-server NTP_SERVER]
  [--no-proxy NO_PROXY]
  [--overcloud-ssh-user OVERCLOUD_SSH_USER]
  [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
  [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
  [--environment-file <HEAT ENVIRONMENT FILE>]
  [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
  [--roles-file ROLES_FILE]
  [--networks-file NETWORKS_FILE]
  [--plan-environment-file PLAN_ENVIRONMENT_FILE]
  [--no-cleanup]
  [--update-plan-only]
  [--validation-errors-nonfatal]
  [--validation-warnings-fatal]
  [--disable-validations]
  [--inflight-validations]
  [--dry-run] [--run-validations]
  [--skip-postconfig]
  [--force-postconfig]
  [--skip-deploy-identifier]
  [--rhel-reg]
  [--reg-method {satellite,portal}]
  [--reg-org REG_ORG] [--reg-force]
  [--reg-sat-url REG_SAT_URL]
  [--reg-activation-key REG_ACTIVATION_KEY]
  [--answers-file ANSWERS_FILE]
  [--disable-password-generation]
  [--deployed-server]
  [--config-download]
  [--no-config-download]
  [--config-download-only]
  [--output-dir OUTPUT_DIR]
  [--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
```

```

[--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
[--deployment-python-interpreter
DEPLOYMENT_PYTHON_INTERPRETER]

```

Table 57.94. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--control-scale CONTROL_SCALE	New number of control nodes. (deprecated. use an environment file and set the parameter ControllerCount. It will be removed after the "P" release.)
--compute-scale COMPUTE_SCALE	New number of compute nodes. (deprecated. use an environment file and set the parameter ComputeCount. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)
--block-storage-scale BLOCK_STORAGE_SCALE	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter BlockStorageCount. It will be removed after the "P" release.)
--swift-storage-scale SWIFT_STORAGE_SCALE	New number of swift storage nodes. (deprecated. use an environment file and set the parameter ObjectStorageCount. It will be removed after the "P" release.)
--control-flavor CONTROL_FLAVOR	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter OvercloudControlFlavor. It will be removed after the "P" release.)
--compute-flavor COMPUTE_FLAVOR	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter OvercloudComputeFlavor. It will be removed after the "P" release.)

Value	Summary
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudSwiftStorageFlavor</code> . It will be removed after the "P" release.)
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--overcloud-ssh-network OVERCLOUD_SSH_NETWORK</code>	Network name to use for ssh access to overcloud nodes.
<code>--environment-file <HEAT ENVIRONMENT FILE>, -e <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the <code>heat stack-create</code> or <code>heat stack-update</code> command. (Can be specified more than once.)
<code>--environment-directory <HEAT ENVIRONMENT DIRECTORY></code>	Environment file directories that are automatically added to the <code>heat stack-create</code> or <code>heat stack-update</code> commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory. May be an absolute path or the path relative to <code>--templates</code>
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data.yaml</code> in the <code>--templates</code> directory

Value	Summary
--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE	Plan environment file, overrides the default plan-environment.yaml in the --templates directory
--no-cleanup	Don't cleanup temporary files, just log their location
--update-plan-only	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
--validation-errors-nonfatal	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
--validation-warnings-fatal	Exit if there are warnings from the configuration pre-checks.
--disable-validations	Deprecated. disable the pre-deployment validations entirely. These validations are the built-in pre-deployment validations. To enable external validations from tripleo-validations, use the --run-validations flag. These validations are now run via the external validations in tripleo-validations.
--inflight-validations	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
--dry-run	Only run validations, but do not apply any changes.
--run-validations	Run external validations from the tripleo-validations project.
--skip-postconfig	Skip the overcloud post-deployment configuration.
--force-postconfig	Force the overcloud post-deployment configuration.
--skip-deploy-identifier	Skip generation of a unique identifier for the DeployIdentifier parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.

Value	Summary
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--config-download</code>	Run deployment via config-download mechanism. this is now the default, and this CLI options may be removed in the future.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and associated OpenStack resources. No software configuration will be applied.
<code>--config-download-only</code>	Disable the stack create/update, and only run the config-download workflow to apply the software configuration.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used <code>(/var/lib/mistral/<execution id>)</code> .
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by config-download by default.
<code>--config-download-timeout</code> <code>CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for config-download steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.
<code>--deployment-python-interpreter</code> <code>DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.

Table 57.95. Registration Parameters

Value	Summary
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.

Value	Summary
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.

57.51. OVERCLOUD UPGRADE PREPARE

Run `heat stack update` for overcloud nodes to refresh heat stack outputs. The heat stack outputs are what we use later on to generate ansible playbooks which deliver the major upgrade workflow. This is used as the first step for a major upgrade of your overcloud.

Usage:

```

openstack overcloud upgrade prepare [--templates [TEMPLATES]]
    [--stack STACK]
    [--timeout <TIMEOUT>]
    [--control-scale CONTROL_SCALE]
    [--compute-scale COMPUTE_SCALE]
    [--ceph-storage-scale CEPH_STORAGE_SCALE]
    [--block-storage-scale BLOCK_STORAGE_SCALE]
    [--swift-storage-scale SWIFT_STORAGE_SCALE]
    [--control-flavor CONTROL_FLAVOR]
    [--compute-flavor COMPUTE_FLAVOR]
    [--ceph-storage-flavor CEPH_STORAGE_FLAVOR]
    [--block-storage-flavor BLOCK_STORAGE_FLAVOR]
    [--swift-storage-flavor SWIFT_STORAGE_FLAVOR]
    [--libvirt-type {kvm,qemu}]
    [--ntp-server NTP_SERVER]
    [--no-proxy NO_PROXY]
    [--overcloud-ssh-user OVERCLOUD_SSH_USER]
    [--overcloud-ssh-key OVERCLOUD_SSH_KEY]
    [--overcloud-ssh-network OVERCLOUD_SSH_NETWORK]
    [--environment-file <HEAT ENVIRONMENT FILE>]
    [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--no-cleanup] [--update-plan-only]
    [--validation-errors-nonfatal]
    [--validation-warnings-fatal]
    [--disable-validations]
    [--inflight-validations]
    [--dry-run] [--run-validations]
    [--skip-postconfig]

```

```

[--force-postconfig]
[--skip-deploy-identifier]
[--rhel-reg]
[--reg-method {satellite,portal}]
[--reg-org REG_ORG] [--reg-force]
[--reg-sat-url REG_SAT_URL]
[--reg-activation-key REG_ACTIVATION_KEY]
[--answers-file ANSWERS_FILE]
[--disable-password-generation]
[--deployed-server]
[--config-download]
[--no-config-download]
[--config-download-only]
[--output-dir OUTPUT_DIR]
[--override-ansible-cfg OVERRIDE_ANSIBLE_CFG]
[--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT]
[--deployment-python-interpreter
DEPLOYMENT_PYTHON_INTERPRETER]

```

Table 57.96. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--stack STACK	Stack name to create or update
--timeout <TIMEOUT>, -t <TIMEOUT>	Deployment timeout in minutes.
--control-scale CONTROL_SCALE	New number of control nodes. (deprecated. use an environment file and set the parameter ControllerCount. It will be removed after the "P" release.)
--compute-scale COMPUTE_SCALE	New number of compute nodes. (deprecated. use an environment file and set the parameter ComputeCount. It will be removed after the "P" release.)
--ceph-storage-scale CEPH_STORAGE_SCALE	New number of ceph storage nodes. (deprecated. use an environment file and set the parameter CephStorageCount. It will be removed after the "P" release.)
--block-storage-scale BLOCK_STORAGE_SCALE	New number of cinder storage nodes. (deprecated. use an environment file and set the parameter BlockStorageCount. It will be removed after the "P" release.)

Value	Summary
<code>--swift-storage-scale SWIFT_STORAGE_SCALE</code>	New number of swift storage nodes. (deprecated. use an environment file and set the parameter <code>ObjectStorageCount</code> . It will be removed after the "P" release.)
<code>--control-flavor CONTROL_FLAVOR</code>	Nova flavor to use for control nodes. (deprecated. use an environment file and set the parameter <code>OvercloudControlFlavor</code> . It will be removed after the "P" release.)
<code>--compute-flavor COMPUTE_FLAVOR</code>	Nova flavor to use for compute nodes. (deprecated. use an environment file and set the parameter <code>OvercloudComputeFlavor</code> . It will be removed after the "P" release.)
<code>--ceph-storage-flavor CEPH_STORAGE_FLAVOR</code>	Nova flavor to use for ceph storage nodes. (DEPRECATED. Use an environment file and set the parameter <code>OvercloudCephStorageFlavor</code> . It will be removed after the "P" release.)
<code>--block-storage-flavor BLOCK_STORAGE_FLAVOR</code>	Nova flavor to use for cinder storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudBlockStorageFlavor</code> . It will be removed after the "P" release.)
<code>--swift-storage-flavor SWIFT_STORAGE_FLAVOR</code>	Nova flavor to use for swift storage nodes (DEPRECATED. Use an environment file and set the parameter <code>OvercloudSwiftStorageFlavor</code> . It will be removed after the "P" release.)
<code>--libvirt-type {kvm,qemu}</code>	Libvirt domain type.
<code>--ntp-server NTP_SERVER</code>	The ntp for overcloud nodes.
<code>--no-proxy NO_PROXY</code>	A comma separated list of hosts that should not be proxied.
<code>--overcloud-ssh-user OVERCLOUD_SSH_USER</code>	User for ssh access to overcloud nodes
<code>--overcloud-ssh-key OVERCLOUD_SSH_KEY</code>	Key path for ssh access to overcloud nodes.
<code>--overcloud-ssh-network OVERCLOUD_SSH_NETWORK</code>	Network name to use for ssh access to overcloud nodes.
<code>--environment-file <HEAT ENVIRONMENT FILE>, -e <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)

Value	Summary
<code>--environment-directory <HEAT ENVIRONMENT DIRECTORY></code>	Environment file directories that are automatically added to the <code>heat stack-create</code> or <code>heat stack-update</code> commands. Can be specified more than once. Files in directories are loaded in ascending sort order.
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default <code>roles_data.yaml</code> in the <code>--templates</code> directory. May be an absolute path or the path relative to <code>--templates</code>
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Networks file, overrides the default <code>network_data.yaml</code> in the <code>--templates</code> directory
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default <code>plan-environment.yaml</code> in the <code>--templates</code> directory
<code>--no-cleanup</code>	Don't cleanup temporary files, just log their location
<code>--update-plan-only</code>	Only update the plan. do not perform the actual deployment. NOTE: Will move to a discrete command in a future release.
<code>--validation-errors-nonfatal</code>	Allow the deployment to continue in spite of validation errors. Note that attempting deployment while errors exist is likely to fail.
<code>--validation-warnings-fatal</code>	Exit if there are warnings from the configuration pre-checks.
<code>--disable-validations</code>	Deprecated. disable the pre-deployment validations entirely. These validations are the built-in pre-deployment validations. To enable external validations from <code>tripleo-validations</code> , use the <code>--run-validations</code> flag. These validations are now run via the external validations in <code>tripleo-validations</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--dry-run</code>	Only run validations, but do not apply any changes.
<code>--run-validations</code>	Run external validations from the <code>tripleo-validations</code> project.

Value	Summary
<code>--skip-postconfig</code>	Skip the overcloud post-deployment configuration.
<code>--force-postconfig</code>	Force the overcloud post-deployment configuration.
<code>--skip-deploy-identifier</code>	Skip generation of a unique identifier for the <code>DeployIdentifier</code> parameter. The software configuration deployment steps will only be triggered if there is an actual change to the configuration. This option should be used with Caution, and only if there is confidence that the software configuration does not need to be run, such as when scaling out certain roles.
<code>--answers-file ANSWERS_FILE</code>	Path to a yaml file with arguments and parameters.
<code>--disable-password-generation</code>	Disable password generation.
<code>--deployed-server</code>	Use pre-provisioned overcloud nodes. removes baremetal,compute and image services requirements from the undercloud node. Must only be used with the <code>--disable-validations</code> .
<code>--config-download</code>	Run deployment via config-download mechanism. this is now the default, and this CLI options may be removed in the future.
<code>--no-config-download, --stack-only</code>	Disable the config-download workflow and only create the stack and associated OpenStack resources. No software configuration will be applied.
<code>--config-download-only</code>	Disable the stack create/update, and only run the config-download workflow to apply the software configuration.
<code>--output-dir OUTPUT_DIR</code>	Directory to use for saved output when using <code>--config-download</code> . The directory must be writeable by the mistral user. When not specified, the default server side value will be used <code>/var/lib/mistral/<execution id></code> .
<code>--override-ansible-cfg OVERRIDE_ANSIBLE_CFG</code>	Path to ansible configuration file. the configuration in the file will override any configuration used by config-download by default.
<code>--config-download-timeout CONFIG_DOWNLOAD_TIMEOUT</code>	Timeout (in minutes) to use for config-download steps. If unset, will default to however much time is leftover from the <code>--timeout</code> parameter after the stack operation.

Value	Summary
<code>--deployment-python-interpreter</code> <code>DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. This may need to be used if deploying on a python2 host from a python3 system or vice versa.

Table 57.97. Registration Parameters

Value	Summary
<code>--rhel-reg</code>	Register overcloud nodes to the customer portal or a satellite.
<code>--reg-method {satellite,portal}</code>	Rhel registration method to use for the overcloud nodes.
<code>--reg-org REG_ORG</code>	Organization key to use for registration.
<code>--reg-force</code>	Register the system even if it is already registered.
<code>--reg-sat-url REG_SAT_URL</code>	Satellite server to register overcloud nodes.
<code>--reg-activation-key REG_ACTIVATION_KEY</code>	Activation key to use for registration.

57.52. OVERCLOUD UPGRADE RUN

Run major upgrade ansible playbooks on Overcloud nodes This will run the major upgrade ansible playbooks on the overcloud. By default all playbooks are executed, that is the `upgrade_steps_playbook.yaml` then the `deploy_steps_playbook.yaml` and then the `post_upgrade_steps_playbook.yaml`. The upgrade playbooks are made available after completion of the `overcloud upgrade prepare` command. This `overcloud upgrade run` command is the second step in the major upgrade workflow.

Usage:

```
openstack overcloud upgrade run [-h]
                               (--nodes NODES | --roles ROLES | --limit LIMIT)
                               [--playbook PLAYBOOK]
                               [--static-inventory STATIC_INVENTORY]
                               [--ssh-user SSH_USER] [--tags TAGS]
                               [--skip-tags SKIP_TAGS] [--stack STACK]
```

Table 57.98. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--nodes NODES</code>	Deprecated: this option will be remove in the future release Use the limit option instead.A string that identifies a single node or comma-separated list of nodes to be upgraded in parallel in this upgrade run invocation. For example: <code>--nodes "compute-0, compute-1, compute-5"</code> . NOTE: Using this parameter with nodes of controlplane roles (e.g. <code>--nodes controller-1"</code>) is NOT supported and WILL end badly unless you include ALL nodes of that role as a comma separated string. You should instead use the <code>--roles</code> parameter for controlplane roles and specify the role name.
<code>--roles ROLES</code>	Deprecated: this option will be remove in the future release Use the limit option instead.A string that identifies the role or comma-separated list of roles to be upgraded in this upgrade run invocation. NOTE: nodes of specified role(s) are upgraded in parallel. This is REQUIRED for controlplane roles. For non controlplane roles (e.g., "Compute"), you may consider instead using the <code>--nodes</code> argument to limit the upgrade to a specific node or list (comma separated string) of nodes.
<code>--limit LIMIT</code>	A string that identifies a single node or comma-separated list of nodes to be upgraded in parallel in this upgrade run invocation. For example: <code>--limit "compute-0, compute-1, compute-5"</code> .
<code>--playbook PLAYBOOK</code>	Ansible playbook to use for the major upgrade. Defaults to the special value <i>all</i> which causes all the upgrade playbooks to run. That is the <code>upgrade_steps_playbook.yaml</code> then <code>deploy_steps_playbook.yaml</code> and then <code>post_upgrade_steps_playbook.yaml</code> . Set this to each of those playbooks in consecutive invocations of this command if you prefer to run them manually. Note: you will have to run all of those playbooks so that all services are upgraded and running with the target version configuration.
<code>--static-inventory STATIC_INVENTORY</code>	Path to an existing ansible inventory to use. if not specified, one will be generated in <code>~/tripleo-ansible-inventory.yaml</code>
<code>--ssh-user SSH_USER</code>	Deprecated: only <code>tripleo-admin</code> should be used as ssh user.
<code>--tags TAGS</code>	A string specifying the tag or comma separated list of tags to be passed as <code>--tags</code> to <code>ansible-playbook</code> .

Value	Summary
--skip-tags SKIP_TAGS	A string specifying the tag or comma separated list of tags to be passed as --skip-tags to ansible-playbook. The currently supported values are <i>validation</i> and <i>pre-upgrade</i> . In particular <i>validation</i> is useful if you must re-run following a failed upgrade and some services cannot be started.
--stack STACK	Name or id of heat stack (default=env: OVERCLOUD_STACK_NAME)

CHAPTER 58. POLICY

This chapter describes the commands under the **policy** command.

58.1. POLICY CREATE

Create new policy

Usage:

```
openstack policy create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--type <type>]
                        <filename>
```

Table 58.1. Positional Arguments

Value	Summary
<filename>	New serialized policy rules file

Table 58.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type <type>	New mime type of the policy rules file (defaults to application/json)

Table 58.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 58.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 58.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 58.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

58.2. POLICY DELETE

Delete policy(s)

Usage:

```
openstack policy delete [-h] <policy> [<policy> ...]
```

Table 58.7. Positional Arguments

Value	Summary
<policy>	Policy(s) to delete

Table 58.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

58.3. POLICY LIST

List policies

Usage:

```
openstack policy list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
```

```

[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN] [--long]

```

Table 58.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 58.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 58.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 58.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 58.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

58.4. POLICY SET

Set policy properties

Usage:

```
openstack policy set [-h] [--type <type>] [--rules <filename>] <policy>
```

Table 58.14. Positional Arguments

Value	Summary
<code><policy></code>	Policy to modify

Table 58.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--type <type></code>	New mime type of the policy rules file
<code>--rules <filename></code>	New serialized policy rules file

58.5. POLICY SHOW

Display policy details

Usage:

```
openstack policy show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <policy>
```

Table 58.16. Positional Arguments

Value	Summary
<policy>	Policy to display

Table 58.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 58.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 58.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 58.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 58.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

Value	Summary
-------	---------

CHAPTER 59. PORT

This chapter describes the commands under the **port** command.

59.1. PORT CREATE

Create a new port

Usage:

```
openstack port create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] --network <network>
                    [--description <description>]
                    [--device <device-id>]
                    [--mac-address <mac-address>]
                    [--device-owner <device-owner>]
                    [--vnic-type <vnic-type>] [--host <host-id>]
                    [--dns-domain dns-domain] [--dns-name <dns-name>]
                    [--fixed-ip subnet=<subnet>,ip-address=<ip-address> | --no-fixed-ip]
                    [--binding-profile <binding-profile>]
                    [--enable | --disable]
                    [--enable-uplink-status-propagation | --disable-uplink-status-propagation]
                    [--project <project>]
                    [--project-domain <project-domain>]
                    [--security-group <security-group> | --no-security-group]
                    [--qos-policy <qos-policy>]
                    [--enable-port-security | --disable-port-security]
                    [--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]]
                    [--tag <tag> | --no-tag]
                    <name>
```

Table 59.1. Positional Arguments

Value	Summary
<name>	Name of this port

Table 59.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--network <network>	Network this port belongs to (name or id)
--description <description>	Description of this port
--device <device-id>	Port device id

Value	Summary
--mac-address <mac-address>	Mac address of this port (admin only)
--device-owner <device-owner>	Device owner of this port. this is the entity that uses the port (for example, network:dhcp).
--vnic-type <vnic-type>	Vnic type for this port (direct
direct-physical	macvtap
normal	baremetal
virtio-forwarder, default: normal)	--host <host-id>
Allocate port on host <host-id> (id only)	--dns-domain dns-domain
Set dns domain to this port (requires dns_domain extension for ports)	--dns-name <dns-name>
Set dns name for this port (requires dns integration extension)	--fixed-ip subnet=<subnet>,ip-address=<ip-address>
Desired ip and/or subnet for this port (name or id): subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)	--no-fixed-ip
No ip or subnet for this port.	--binding-profile <binding-profile>
Custom data to be passed as binding:profile. data may be passed as <key>=<value> or JSON. (repeat option to set multiple binding:profile data)	--enable
Enable port (default)	--disable
Disable port	--enable-uplink-status-propagation
Enable uplink status propagate	--disable-uplink-status-propagation
Disable uplink status propagate (default)	--project <project>
Owner's project (name or id)	--project-domain <project-domain>
Domain the project belongs to (name or id). this can be used in case collisions between project names exist.	--security-group <security-group>

Value	Summary
Security group to associate with this port (name or ID) (repeat option to set multiple security groups)	--no-security-group
Associate no security groups with this port	--qos-policy <qos-policy>
Attach qos policy to this port (name or id)	--enable-port-security
Enable port security for this port (default)	--disable-port-security
Disable port security for this port	--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]
Add allowed-address pair associated with this port: ip-address=<ip-address>[,mac-address=<mac-address>] (repeat option to set multiple allowed-address pairs)	--tag <tag>
Tag to be added to the port (repeat option to set multiple tags)	--no-tag

Table 59.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 59.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")--prefix PREFIX	Add a prefix to all variable names

Table 59.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

59.2. PORT DELETE

Delete port(s)

Usage:

```
openstack port delete [-h] <port> [<port> ...]
```

Table 59.7. Positional Arguments

Value	Summary
<code><port></code>	Port(s) to delete (name or id)

Table 59.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

59.3. PORT LIST

List ports

Usage:

```
openstack port list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
  [--quote {all,minimal,none,nonnumeric}]
  [--noindent] [--max-width <integer>] [--fit-width]
  [--print-empty] [--sort-column SORT_COLUMN]
  [--device-owner <device-owner>]
  [--network <network>]
  [--router <router> | --server <server> | --device-id <device-id>]
  [--mac-address <mac-address>] [--long]
  [--project <project>]
  [--project-domain <project-domain>]
  [--fixed-ip subnet=<subnet>,ip-address=<ip-address>,ip-substring=<ip-substring>]
```

```

[--tags <tag>[,<tag>,...]]
[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]

```

Table 59.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--device-owner <device-owner>	List only ports with the specified device owner. this is the entity that uses the port (for example, network:dhcp).
--network <network>	List only ports connected to this network (name or id)
--router <router>	List only ports attached to this router (name or id)
--server <server>	List only ports attached to this server (name or id)
--device-id <device-id>	List only ports with the specified device id
--mac-address <mac-address>	List only ports with this mac address
--long	List additional fields in output
--project <project>	List ports according to their project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--fixed-ip subnet=<subnet>,ip-address=<ip-address>,ip-substring=<ip-substring>	Desired ip and/or subnet for filtering ports (name or ID): subnet=<subnet>,ip-address=<ip-address>,ip-substring=<ip-substring> (repeat option to set multiple fixed IP addresses)
--tags <tag>[,<tag>,...]	List ports which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List ports which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude ports which have all given tag(s) (comma-separated list of tags)
--not-any-tags <tag>[,<tag>,...]	Exclude ports which have any given tag(s) (comma-separated list of tags)

Table 59.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 59.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 59.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

59.4. PORT SET

Set port properties

Usage:

```
openstack port set [-h] [--description <description>]
                  [--device <device-id>] [--mac-address <mac-address>]
```

```

[--device-owner <device-owner>]
[--vnic-type <vnic-type>] [--host <host-id>]
[--dns-domain dns-domain] [--dns-name <dns-name>]
[--enable | --disable] [--name <name>]
[--fixed-ip subnet=<subnet>,ip-address=<ip-address>]
[--no-fixed-ip]
[--binding-profile <binding-profile>]
[--no-binding-profile] [--qos-policy <qos-policy>]
[--security-group <security-group>]
[--no-security-group]
[--enable-port-security | --disable-port-security]
[--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]]
[--no-allowed-address]
[--data-plane-status <status>] [--tag <tag>]
[--no-tag]
<port>

```

Table 59.14. Positional Arguments

Value	Summary
<port>	Port to modify (name or id)

Table 59.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of this port
--device <device-id>	Port device id
--mac-address <mac-address>	Mac address of this port (admin only)
--device-owner <device-owner>	Device owner of this port. this is the entity that uses the port (for example, network:dhcp).
--vnic-type <vnic-type>	Vnic type for this port (direct
direct-physical	macvtap
normal	baremetal
virtio-forwarder, default: normal)	--host <host-id>
Allocate port on host <host-id> (id only)	--dns-domain dns-domain

Value	Summary
Set dns domain to this port (requires dns_domain extension for ports)	--dns-name <dns-name>
Set dns name for this port (requires dns integration extension)	--enable
Enable port	--disable
Disable port	--name <name>
Set port name	--fixed-ip subnet=<subnet>,ip-address=<ip-address>
Desired ip and/or subnet for this port (name or id): subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)	--no-fixed-ip
Clear existing information of fixed ip addresses.Specify both --fixed-ip and --no-fixed-ip to overwrite the current fixed IP addresses.	--binding-profile <binding-profile>
Custom data to be passed as binding:profile. data may be passed as <key>=<value> or JSON. (repeat option to set multiple binding:profile data)	--no-binding-profile
Clear existing information of binding:profile. specify both --binding-profile and --no-binding-profile to overwrite the current binding:profile information.	--qos-policy <qos-policy>
Attach qos policy to this port (name or id)	--security-group <security-group>
Security group to associate with this port (name or ID) (repeat option to set multiple security groups)	--no-security-group
Clear existing security groups associated with this port	--enable-port-security
Enable port security for this port	--disable-port-security
Disable port security for this port	--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]
Add allowed-address pair associated with this port: ip-address=<ip-address>[,mac-address=<mac-address>] (repeat option to set multiple allowed-address pairs)	--no-allowed-address

Value	Summary
Clear existing allowed-address pairs associated with this port. (Specify both <code>--allowed-address</code> and <code>--no-allowed-address</code> to overwrite the current allowed-address pairs)	<code>--data-plane-status <status></code>
Set data plane status of this port (active	down). Unset it to None with the <code>port unset</code> command (requires data plane status extension)
<code>--tag <tag></code>	Tag to be added to the port (repeat option to set multiple tags)
<code>--no-tag</code>	Clear tags associated with the port. specify both <code>--tag</code> and <code>--no-tag</code> to overwrite current tags

59.5. PORT SHOW

Display port details

Usage:

```
openstack port show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                   [--noindent] [--prefix PREFIX]
                   [--max-width <integer>] [--fit-width]
                   [--print-empty]
                   <port>
```

Table 59.16. Positional Arguments

Value	Summary
<code><port></code>	Port to display (name or id)

Table 59.17. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 59.18. Output Formatters

Value	Summary
output formatter options- <code>f</code> <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 59.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 59.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 59.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

59.6. PORT UNSET

Unset port properties

Usage:

```
openstack port unset [-h]
                    [--fixed-ip subnet=<subnet>,ip-address=<ip-address>]
                    [--binding-profile <binding-profile-key>]
                    [--security-group <security-group>]
                    [--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]]
                    [--qos-policy] [--data-plane-status]
                    [--tag <tag> | --all-tag]
                    <port>
```

Table 59.22. Positional Arguments

Value	Summary
<port>	Port to modify (name or id)

Table 59.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fixed-ip subnet=<subnet>,ip-address=<ip-address>	Desired ip and/or subnet which should be removed from this port (name or ID): subnet=<subnet>,ip-address=<ip-address> (repeat option to unset multiple fixed IP addresses)
--binding-profile <binding-profile-key>	Desired key which should be removed from binding:profile (repeat option to unset multiple binding:profile data)
--security-group <security-group>	Security group which should be removed this port (name or ID) (repeat option to unset multiple security groups)
--allowed-address ip-address=<ip-address>[,mac-address=<mac-address>]	Desired allowed-address pair which should be removed from this port: ip-address=<ip-address> [,mac-address=<mac-address>] (repeat option to unset multiple allowed-address pairs)
--qos-policy	Remove the qos policy attached to the port
--data-plane-status	Clear existing information of data plane status
--tag <tag>	Tag to be removed from the port (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the port

CHAPTER 60. PROJECT

This chapter describes the commands under the **project** command.

60.1. PROJECT CREATE

Create new project

Usage:

```
openstack project create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--domain <domain>]
                        [--parent <project>]
                        [--description <description>]
                        [--enable | --disable]
                        [--property <key=value>] [--or-show]
                        [--tag <tag>]
                        <project-name>
```

Table 60.1. Positional Arguments

Value	Summary
<project-name>	New project name

Table 60.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain owning the project (name or id)
--parent <project>	Parent of the project (name or id)
--description <description>	Project description
--enable	Enable project
--disable	Disable project
--property <key=value>	Add a property to <name> (repeat option to set multiple properties)
--or-show	Return existing project

Value	Summary
<code>--tag <tag></code>	Tag to be added to the project (repeat option to set multiple tags)

Table 60.3. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 60.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 60.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 60.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

60.2. PROJECT DELETE

Delete project(s)

Usage:

```
openstack project delete [-h] [--domain <domain>]
                        <project> [<project> ...]
```

Table 60.7. Positional Arguments

Value	Summary
<project>	Project(s) to delete (name or id)

Table 60.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain owning <project> (name or id)

60.3. PROJECT LIST

List projects

Usage:

```
openstack project list [-h] [-f {csv,json,table,value,yaml}]
                      [-c COLUMN]
                      [--quote {all,minimal,none,nonnumeric}]
                      [--noindent] [--max-width <integer>]
                      [--fit-width] [--print-empty]
                      [--sort-column SORT_COLUMN] [--domain <domain>]
                      [--user <user>] [--my-projects] [--long]
                      [--sort <key>[:<direction>]]
                      [--tags <tag>[,<tag>,...]]
                      [--tags-any <tag>[,<tag>,...]]
                      [--not-tags <tag>[,<tag>,...]]
                      [--not-tags-any <tag>[,<tag>,...]]
```

Table 60.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Filter projects by <domain> (name or id)
--user <user>	Filter projects by <user> (name or id)
--my-projects	List projects for the authenticated user. supersedes other filters.

Value	Summary
<code>--long</code>	List additional fields in output
<code>--sort <key>[:<direction>]</code>	Sort output by selected keys and directions (asc or desc) (default: asc), repeat this option to specify multiple keys and directions.
<code>--tags <tag>[,<tag>,...]</code>	List projects which have all given tag(s) (comma-separated list of tags)
<code>--tags-any <tag>[,<tag>,...]</code>	List projects which have any given tag(s) (comma-separated list of tags)
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude projects which have all given tag(s) (comma-separated list of tags)
<code>--not-tags-any <tag>[,<tag>,...]</code>	Exclude projects which have any given tag(s) (comma-separated list of tags)

Table 60.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 60.11. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 60.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 60.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

60.4. PROJECT PURGE

Clean resources associated with a project

Usage:

```
openstack project purge [-h] [--dry-run] [--keep-project]
                        (--auth-project | --project <project>)
                        [--project-domain <project-domain>]
```

Table 60.14. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--dry-run</code>	List a project's resources
<code>--keep-project</code>	Clean project resources, but don't delete the project
<code>--auth-project</code>	Delete resources of the project used to authenticate
<code>--project <project></code>	Project to clean (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

60.5. PROJECT SET

Set project properties

Usage:

```
openstack project set [-h] [--name <name>] [--domain <domain>]
                     [--description <description>]
                     [--enable | --disable] [--property <key=value>]
```

```

[--tag <tag>] [--clear-tags] [--remove-tag <tag>]
<project>

```

Table 60.15. Positional Arguments

Value	Summary
<project>	Project to modify (name or id)

Table 60.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set project name
--domain <domain>	Domain owning <project> (name or id)
--description <description>	Set project description
--enable	Enable project
--disable	Disable project
--property <key=value>	Set a property on <project> (repeat option to set multiple properties)
--tag <tag>	Tag to be added to the project (repeat option to set multiple tags)
--clear-tags	Clear tags associated with the project. specify both -tag and --clear-tags to overwrite current tags
--remove-tag <tag>	Tag to be deleted from the project (repeat option to delete multiple tags)

60.6. PROJECT SHOW

Display project details

Usage:

```

openstack project show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--domain <domain>] [--parents]
                        [--children]
                        <project>

```


Table 60.17. Positional Arguments

Value	Summary
<project>	Project to display (name or id)

Table 60.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain owning <project> (name or id)
--parents	Show the project's parents as a list
--children	Show project's subtree (children) as a list

Table 60.19. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 60.20. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 60.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 60.22. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 61. PTR

This chapter describes the commands under the **ptr** command.

61.1. PTR RECORD LIST

List floatingip ptr records

Usage:

```
openstack ptr record list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
```

Table 61.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 61.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 61.3. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 61.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 61.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

61.2. PTR RECORD SET

Set floatingip ptr record

Usage:

```
openstack ptr record set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        [--description DESCRIPTION | --no-description]
                        [--ttl TTL | --no-ttl] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        floatingip_id ptrdname
```

Table 61.6. Positional Arguments

Value	Summary
<code>floatingip_id</code>	Floating ip id in format region:floatingip_id
<code>ptrdname</code>	Ptrd name

Table 61.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description DESCRIPTION	Description
--no-description--ttl TTL	Ttl
--no-ttl--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 61.8. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 61.9. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 61.10. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 61.11. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

61.3. PTR RECORD SHOW

Show floatingip ptr record details

Usage:

```
openstack ptr record show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          floatingip_id
```

Table 61.12. Positional Arguments

Value	Summary
floatingip_id	Floating ip id in format region:floatingip_id

Table 61.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 61.14. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 61.15. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 61.16. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 61.17. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

61.4. PTR RECORD UNSET

Unset floatingip ptr record

Usage:

```
openstack ptr record unset [-h] [--all-projects] [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          floatingip_id
```

Table 61.18. Positional Arguments

Value	Summary
floatingip_id	Floating ip id in format region:floatingip_id

Table 61.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

CHAPTER 62. QUOTA

This chapter describes the commands under the **quota** command.

62.1. QUOTA LIST

List quotas for all projects with non-default quota values or list detailed quota informations for requested project

Usage:

```
openstack quota list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--project <project>] [--detail]
                    (--compute | --volume | --network)
```

Table 62.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	List quotas for this project <project> (name or id)
--detail	Show details about quotas usage
--compute	List compute quota
--volume	List volume quota
--network	List network quota

Table 62.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 62.3. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 62.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 62.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

62.2. QUOTA SET

Set quotas for project or class

Usage:

```

openstack quota set [-h] [--class] [--cores <cores>]
                    [--fixed-ips <fixed-ips>]
                    [--injected-file-size <injected-file-size>]
                    [--injected-path-size <injected-path-size>]
                    [--injected-files <injected-files>]
                    [--instances <instances>] [--key-pairs <key-pairs>]
                    [--properties <properties>] [--ram <ram>]
                    [--server-groups <server-groups>]
                    [--server-group-members <server-group-members>]
                    [--backups <backups>]
                    [--backup-gigabytes <backup-gigabytes>]
                    [--gigabytes <gigabytes>]
                    [--per-volume-gigabytes <per-volume-gigabytes>]
                    [--snapshots <snapshots>] [--volumes <volumes>]
                    [--floating-ips <floating-ips>]
                    [--secgroup-rules <secgroup-rules>]
                    [--secgroups <secgroups>] [--networks <networks>]
                    [--subnets <subnets>] [--ports <ports>]
                    [--routers <routers>]
                    [--rbac-policies <rbac-policies>] [--vips <vips>]

```

```

[--subnetpools <subnetpools>]
[--health-monitors <health-monitors>]
[--l7policies <l7policies>]
[--volume-type <volume-type>]
<project/class>

```

Table 62.6. Positional Arguments

Value	Summary
<project/class>	Set quotas for this project or class (name/id)

Table 62.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--class	Set quotas for <class>
--cores <cores>	New value for the cores quota
--fixed-ips <fixed-ips>	New value for the fixed-ips quota
--injected-file-size <injected-file-size>	New value for the injected-file-size quota
--injected-path-size <injected-path-size>	New value for the injected-path-size quota
--injected-files <injected-files>	New value for the injected-files quota
--instances <instances>	New value for the instances quota
--key-pairs <key-pairs>	New value for the key-pairs quota
--properties <properties>	New value for the properties quota
--ram <ram>	New value for the ram quota
--server-groups <server-groups>	New value for the server-groups quota
--server-group-members <server-group-members>	New value for the server-group-members quota
--backups <backups>	New value for the backups quota
--backup-gigabytes <backup-gigabytes>	New value for the backup-gigabytes quota
--gigabytes <gigabytes>	New value for the gigabytes quota

Value	Summary
--per-volume-gigabytes <per-volume-gigabytes>	New value for the per-volume-gigabytes quota
--snapshots <snapshots>	New value for the snapshots quota
--volumes <volumes>	New value for the volumes quota
--floating-ips <floating-ips>	New value for the floating-ips quota
--secgroup-rules <secgroup-rules>	New value for the secgroup-rules quota
--secgroups <secgroups>	New value for the secgroups quota
--networks <networks>	New value for the networks quota
--subnets <subnets>	New value for the subnets quota
--ports <ports>	New value for the ports quota
--routers <routers>	New value for the routers quota
--rbac-policies <rbac-policies>	New value for the rbac-policies quota
--vips <vips>	New value for the vips quota
--subnetpools <subnetpools>	New value for the subnetpools quota
--health-monitors <health-monitors>	New value for the health-monitors quota
--l7policies <l7policies>	New value for the l7policies quota
--volume-type <volume-type>	Set quotas for a specific <volume-type>

62.3. QUOTA SHOW

Show quotas for project or class. Specify ``--os-compute-api-version 2.50`` or higher to see ``server-groups`` and ``server-group-members`` output for a given quota class.

Usage:

```
openstack quota show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--class | --default]
                    [<project/class>]
```

Table 62.8. Positional Arguments

Value	Summary
<project/class>	Show quotas for this project or class (name or id)

Table 62.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--class	Show quotas for <class>
--default	Show default quotas for <project>

Table 62.10. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 62.11. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 62.12. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 62.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 63. RECORDSET

This chapter describes the commands under the **recordset** command.

63.1. RECORDSET CREATE

Create new recordset

Usage:

```
openstack recordset create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] --record RECORD --type TYPE
                          [--ttl TTL] [--description DESCRIPTION]
                          [--all-projects] [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          zone_id name
```

Table 63.1. Positional Arguments

Value	Summary
zone_id	Zone id
name	Recordset name

Table 63.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--record RECORD	Recordset record, repeat if necessary
--type TYPE	Recordset type
--ttl TTL	Time to live (seconds)
--description DESCRIPTION	Description
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 63.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 63.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 63.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 63.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

63.2. RECORDSET DELETE

Delete recordset

Usage:

```
openstack recordset delete [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          zone_id id
```


Table 63.7. Positional Arguments

Value	Summary
zone_id	Zone id
id	Recordset id

Table 63.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 63.9. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 63.10. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 63.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 63.12. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

63.3. RECORDSET LIST

List recordsets

Usage:

```

openstack recordset list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--name NAME]
                        [--type TYPE] [--data DATA] [--ttl TTL]
                        [--description DESCRIPTION] [--status STATUS]
                        [--action ACTION] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        zone_id

```

Table 63.13. Positional Arguments

Value	Summary
<code>zone_id</code>	Zone id. to list all recordsets specify <i>all</i>

Table 63.14. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name NAME</code>	Recordset name
<code>--type TYPE</code>	Recordset type
<code>--data DATA</code>	Recordset record data

Value	Summary
--ttl TTL	Time to live (seconds)
--description DESCRIPTION	Description
--status STATUS	Recordset status
--action ACTION	Recordset action
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 63.15. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 63.16. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 63.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 63.18. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

63.4. RECORDSET SET

Set recordset properties

Usage:

```
openstack recordset set [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--record RECORD]
                        [--description DESCRIPTION | --no-description]
                        [--ttl TTL | --no-ttl] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        zone_id id
```

Table 63.19. Positional Arguments

Value	Summary
<code>zone_id</code>	Zone id
<code>id</code>	Recordset id

Table 63.20. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--record RECORD</code>	Recordset record, repeat if necessary
<code>--description DESCRIPTION</code>	Description
<code>--no-description--ttl TTL</code>	Ttl

Value	Summary
<code>--no-ttl--all-projects</code>	Show results from all projects. default: false
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 63.21. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 63.22. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 63.23. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 63.24. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

63.5. RECORDSET SHOW

Show recordset details

Usage:

```
openstack recordset show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        zone_id id
```

Table 63.25. Positional Arguments

Value	Summary
zone_id	Zone id
id	Recordset id

Table 63.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 63.27. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 63.28. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 63.29. Shell Formatter

Value	Summary
<code>a</code> format a UNIX shell can parse (<code>variable="value"</code>) <code>--prefix PREFIX</code>	Add a prefix to all variable names

Table 63.30. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 64. REGION

This chapter describes the commands under the **region** command.

64.1. REGION CREATE

Create new region

Usage:

```
openstack region create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--parent-region <region-id>]
                        [--description <description>]
                        <region-id>
```

Table 64.1. Positional Arguments

Value	Summary
<region-id>	New region id

Table 64.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--parent-region <region-id>	Parent region id
--description <description>	New region description

Table 64.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 64.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 64.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 64.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

64.2. REGION DELETE

Delete region(s)

Usage:

```
openstack region delete [-h] <region-id> [<region-id> ...]
```

Table 64.7. Positional Arguments

Value	Summary
<region-id>	Region id(s) to delete

Table 64.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

64.3. REGION LIST

List regions

Usage:

```
openstack region list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--parent-region <region-id>]

```

Table 64.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--parent-region <region-id>	Filter by parent region id

Table 64.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 64.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 64.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 64.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

64.4. REGION SET

Set region properties

Usage:

```
openstack region set [-h] [--parent-region <region-id>]
                    [--description <description>]
                    <region-id>
```

Table 64.14. Positional Arguments

Value	Summary
<region-id>	Region to modify

Table 64.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--parent-region <region-id>	New parent region id
--description <description>	New region description

64.5. REGION SHOW

Display region details

Usage:

```
openstack region show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <region-id>
```

Table 64.16. Positional Arguments

Value	Summary
<region-id>	Region to display

Table 64.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 64.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 64.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 64.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 64.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 65. REGISTERED

This chapter describes the commands under the **registered** command.

65.1. REGISTERED LIMIT CREATE

Create a registered limit

Usage:

```
openstack registered limit create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--description <description>]
                                [--region <region>] --service
                                <service> --default-limit
                                <default-limit>
                                <resource-name>
```

Table 65.1. Positional Arguments

Value	Summary
<resource-name>	The name of the resource to limit

Table 65.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description of the registered limit
--region <region>	Region for the registered limit to affect
--service <service>	Service responsible for the resource to limit (required)
--default-limit <default-limit>	The default limit for the resources to assume (required)

Table 65.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 65.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 65.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 65.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

65.2. REGISTERED LIMIT DELETE

Delete a registered limit

Usage:

```
openstack registered limit delete [-h]
                                <registered-limit-id>
                                [<registered-limit-id> ...]
```

Table 65.7. Positional Arguments

Value	Summary
<registered-limit-id>	Registered limit to delete (id)

Table 65.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

65.3. REGISTERED LIMIT LIST

List registered limits

Usage:

```
openstack registered limit list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--service <service>]
                               [--resource-name <resource-name>]
                               [--region <region>]
```

Table 65.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--service <service>	Service responsible for the resource to limit
--resource-name <resource-name>	The name of the resource to limit
--region <region>	Region for the limit to affect.

Table 65.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 65.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 65.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 65.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

65.4. REGISTERED LIMIT SET

Update information about a registered limit

Usage:

```

openstack registered limit set [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--service <service>]
                               [--resource-name <resource-name>]
                               [--default-limit <default-limit>]

```



```

[--description <description>]
[--region <region>]
<registered-limit-id>

```

Table 65.14. Positional Arguments

Value	Summary
<registered-limit-id>	Registered limit to update (id)

Table 65.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--service <service>	Service to be updated responsible for the resource to limit. Either --service, --resource-name or --region must be different than existing value otherwise it will be duplicate entry
--resource-name <resource-name>	Resource to be updated responsible for the resource to limit. Either --service, --resource-name or --region must be different than existing value otherwise it will be duplicate entry
--default-limit <default-limit>	The default limit for the resources to assume
--description <description>	Description to update of the registered limit
--region <region>	Region for the registered limit to affect. either --service, --resource-name or --region must be different than existing value otherwise it will be duplicate entry

Table 65.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 65.17. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 65.18. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

Table 65.19. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

65.5. REGISTERED LIMIT SHOW

Display registered limit details

Usage:

```

openstack registered limit show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <registered-limit-id>

```

Table 65.20. Positional Arguments

Value	Summary
<code><registered-limit-id></code>	Registered limit to display (id)

Table 65.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 65.22. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 65.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 65.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 65.25. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 66. REQUEST

This chapter describes the commands under the **request** command.

66.1. REQUEST TOKEN AUTHORIZE

Authorize a request token

Usage:

```
openstack request token authorize [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] --request-key
                                <request-key> --role <role>
```

Table 66.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--request-key <request-key>	Request token to authorize (id only) (required)
--role <role>	Roles to authorize (name or id) (repeat option to set multiple values) (required)

Table 66.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 66.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 66.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 66.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

66.2. REQUEST TOKEN CREATE

Create a request token

Usage:

```
openstack request token create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] --consumer-key
                               <consumer-key> --consumer-secret
                               <consumer-secret> --project <project>
                               [--domain <domain>]
```

Table 66.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--consumer-key <consumer-key>	Consumer key (required)
--consumer-secret <consumer-secret>	Consumer secret (required)
--project <project>	Project that consumer wants to access (name or id) (required)
--domain <domain>	Domain owning <project> (name or id)

Table 66.7. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 66.8. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 66.9. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 66.10. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 67. RESOURCE

This chapter describes the commands under the **resource** command.

67.1. RESOURCE MEMBER CREATE

Shares a resource to another tenant.

Usage:

```
openstack resource member create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                resource_id resource_type member_id
```

Table 67.1. Positional Arguments

Value	Summary
resource_id	Resource id to be shared.
resource_type	Resource type.
member_id	Project id to whom the resource is shared to.

Table 67.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 67.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 67.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 67.5. Shell Formatter

Value	Summary
<code>a</code> format a UNIX shell can parse (<code>variable="value"</code>)-- prefix PREFIX	Add a prefix to all variable names

Table 67.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

67.2. RESOURCE MEMBER DELETE

Delete a resource sharing relationship.

Usage:

```
openstack resource member delete [-h] resource resource_type member_id
```

Table 67.7. Positional Arguments

Value	Summary
resource	Resource id to be shared.
resource_type	Resource type.
member_id	Project id to whom the resource is shared to.

Table 67.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

67.3. RESOURCE MEMBER LIST

List all members.

Usage:

```
openstack resource member list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--marker [MARKER]] [--limit [LIMIT]]
                               [--sort_keys [SORT_KEYS]]
                               [--sort_dirs [SORT_DIRS]]
                               [--filter FILTERS]
                               resource_id resource_type
```

Table 67.9. Positional Arguments

Value	Summary
resource_id	Resource id to be shared.
resource_type	Resource type.

Table 67.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description

Value	Summary
<code>--sort_dirs [SORT_DIRS]</code>	Comma-separated list of sort directions. default: asc. Example: <code>mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc</code>
<code>--filter FILTERS</code>	Filters. can be repeated.

Table 67.11. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 67.12. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 67.13. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 67.14. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

67.4. RESOURCE MEMBER SHOW

Show specific member information.

Usage:

```
openstack resource member show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [-m MEMBER_ID]
                               resource resource_type
```

Table 67.15. Positional Arguments

Value	Summary
resource	Resource id to be shared.
resource_type	Resource type.

Table 67.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-m MEMBER_ID, --member-id MEMBER_ID	Project id to whom the resource is shared to. no need to provide this param if you are the resource member.

Table 67.17. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 67.18. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 67.19. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 67.20. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

67.5. RESOURCE MEMBER UPDATE

Update resource sharing status.

Usage:

```

openstack resource member update [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [-m MEMBER_ID]
                                [-s {pending,accepted,rejected}]
                                resource_id resource_type

```

Table 67.21. Positional Arguments

Value	Summary
resource_id	Resource id to be shared.
resource_type	Resource type.

Table 67.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>-m MEMBER_ID, --member-id MEMBER_ID</code>	Project id to whom the resource is shared to. no need to provide this param if you are the resource member.
<code>-s {pending,accepted,rejected}, --status {pending,accepted,rejected}</code>	Status of the sharing.

Table 67.23. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 67.24. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 67.25. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 67.26. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 68. ROLE

This chapter describes the commands under the **role** command.

68.1. ROLE ADD

Adds a role assignment to a user or group on the system, a domain, or a project

Usage:

```
openstack role add [-h]
                   [--system <system> | --domain <domain> | --project <project>]
                   [--user <user> | --group <group>]
                   [--group-domain <group-domain>]
                   [--project-domain <project-domain>]
                   [--user-domain <user-domain>] [--inherited]
                   [--role-domain <role-domain>]
                   <role>
```

Table 68.1. Positional Arguments

Value	Summary
<role>	Role to add to <user> (name or id)

Table 68.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--system <system>	Include <system> (all)
--domain <domain>	Include <domain> (name or id)
--project <project>	Include <project> (name or id)
--user <user>	Include <user> (name or id)
--group <group>	Include <group> (name or id)
--group-domain <group-domain>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Value	Summary
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
<code>--inherited</code>	Specifies if the role grant is inheritable to the sub projects
<code>--role-domain <role-domain></code>	Domain the role belongs to (name or id). this must be specified when the name of a domain specific role is used.

68.2. ROLE ASSIGNMENT LIST

List role assignments

Usage:

```

openstack role assignment list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--effective] [--role <role>]
                               [--role-domain <role-domain>] [--names]
                               [--user <user>]
                               [--user-domain <user-domain>]
                               [--group <group>]
                               [--group-domain <group-domain>]
                               [--domain <domain> | --project <project> | --system <system>]
                               [--project-domain <project-domain>]
                               [--inherited] [--auth-user]
                               [--auth-project]

```

Table 68.3. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--effective</code>	Returns only effective role assignments
<code>--role <role></code>	Role to filter (name or id)
<code>--role-domain <role-domain></code>	Domain the role belongs to (name or id). this must be specified when the name of a domain specific role is used.
<code>--names</code>	Display names instead of ids

Value	Summary
<code>--user <user></code>	User to filter (name or id)
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
<code>--group <group></code>	Group to filter (name or id)
<code>--group-domain <group-domain></code>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.
<code>--domain <domain></code>	Domain to filter (name or id)
<code>--project <project></code>	Project to filter (name or id)
<code>--system <system></code>	Filter based on system role assignments
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--inherited</code>	Specifies if the role grant is inheritable to the sub projects
<code>--auth-user</code>	Only list assignments for the authenticated user
<code>--auth-project</code>	Only list assignments for the project to which the authenticated user's token is scoped

Table 68.4. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 68.5. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 68.6. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 68.7. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

68.3. ROLE CREATE

Create new role

Usage:

```
openstack role create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--domain <domain>] [--or-show]
                    <role-name>
```

Table 68.8. Positional Arguments

Value	Summary
<code><role-name></code>	New role name

Table 68.9. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--domain <domain></code>	Domain the role belongs to (name or id)
<code>--or-show</code>	Return existing role

Table 68.10. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 68.11. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 68.12. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 68.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

68.4. ROLE DELETE

Delete role(s)

Usage:

```
openstack role delete [-h] [--domain <domain>] <role> [<role> ...]
```

Table 68.14. Positional Arguments

Value	Summary
<role>	Role(s) to delete (name or id)

Table 68.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain the role belongs to (name or id)

68.5. ROLE LIST

List roles

Usage:

```
openstack role list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>] [--fit-width]
    [--print-empty] [--sort-column SORT_COLUMN]
    [--system <system> | --domain <domain> | --project <project>]
    [--user <user> | --group <group>]
    [--group-domain <group-domain>]
    [--project-domain <project-domain>]
    [--user-domain <user-domain>] [--inherited]
```

Table 68.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--system <system>	Include <system> (all)
--domain <domain>	Include <domain> (name or id)
--project <project>	Include <project> (name or id)
--user <user>	Include <user> (name or id)

Value	Summary
<code>--group <group></code>	Include <group> (name or id)
<code>--group-domain <group-domain></code>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
<code>--inherited</code>	Specifies if the role grant is inheritable to the sub projects

Table 68.17. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 68.18. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 68.19. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 68.20. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

68.6. ROLE REMOVE

Removes a role assignment from system/domain/project : user/group

Usage:

```

openstack role remove [-h]
                      [--system <system> | --domain <domain> | --project <project>]
                      [--user <user> | --group <group>]
                      [--group-domain <group-domain>]
                      [--project-domain <project-domain>]
                      [--user-domain <user-domain>] [--inherited]
                      [--role-domain <role-domain>]
                      <role>

```

Table 68.21. Positional Arguments

Value	Summary
<code><role></code>	Role to remove (name or id)

Table 68.22. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--system <system></code>	Include <system> (all)
<code>--domain <domain></code>	Include <domain> (name or id)
<code>--project <project></code>	Include <project> (name or id)
<code>--user <user></code>	Include <user> (name or id)
<code>--group <group></code>	Include <group> (name or id)

Value	Summary
<code>--group-domain <group-domain></code>	Domain the group belongs to (name or id). this can be used in case collisions between group names exist.
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
<code>--user-domain <user-domain></code>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
<code>--inherited</code>	Specifies if the role grant is inheritable to the sub projects
<code>--role-domain <role-domain></code>	Domain the role belongs to (name or id). this must be specified when the name of a domain specific role is used.

68.7. ROLE SET

Set role properties

Usage:

```
openstack role set [-h] [--domain <domain>] [--name <name>] <role>
```

Table 68.23. Positional Arguments

Value	Summary
<code><role></code>	Role to modify (name or id)

Table 68.24. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--domain <domain></code>	Domain the role belongs to (name or id)
<code>--name <name></code>	Set role name

68.8. ROLE SHOW

Display role details

Usage:

```

openstack role show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--domain <domain>]
                    <role>

```

Table 68.25. Positional Arguments

Value	Summary
<role>	Role to display (name or id)

Table 68.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain the role belongs to (name or id)

Table 68.27. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 68.28. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 68.29. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 68.30. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 69. ROUTER

This chapter describes the commands under the **router** command.

69.1. ROUTER ADD PORT

Add a port to a router

Usage:

```
openstack router add port [-h] <router> <port>
```

Table 69.1. Positional Arguments

Value	Summary
<router>	Router to which port will be added (name or id)
<port>	Port to be added (name or id)

Table 69.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

69.2. ROUTER ADD SUBNET

Add a subnet to a router

Usage:

```
openstack router add subnet [-h] <router> <subnet>
```

Table 69.3. Positional Arguments

Value	Summary
<router>	Router to which subnet will be added (name or id)
<subnet>	Subnet to be added (name or id)

Table 69.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

69.3. ROUTER CREATE

Create a new router

Usage:

```
openstack router create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--enable | --disable]
                        [--distributed | --centralized]
                        [--ha | --no-ha] [--description <description>]
                        [--project <project>]
                        [--project-domain <project-domain>]
                        [--availability-zone-hint <availability-zone>]
                        [--tag <tag> | --no-tag]
                        <name>
```

Table 69.5. Positional Arguments

Value	Summary
<name>	New router name

Table 69.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--enable	Enable router (default)
--disable	Disable router
--distributed	Create a distributed router
--centralized	Create a centralized router
--ha	Create a highly available router
--no-ha	Create a legacy router
--description <description>	Set router description
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Value	Summary
<code>--availability-zone-hint <availability-zone></code>	Availability zone in which to create this router (Router Availability Zone extension required, repeat option to set multiple availability zones)
<code>--tag <tag></code>	Tag to be added to the router (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the router

Table 69.7. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 69.8. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 69.9. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 69.10. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

69.4. ROUTER DELETE

Delete router(s)

Usage:

```
openstack router delete [-h] <router> [<router> ...]
```

Table 69.11. Positional Arguments

Value	Summary
<code><router></code>	Router(s) to delete (name or id)

Table 69.12. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

69.5. ROUTER LIST

List routers

Usage:

```
openstack router list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                      [--quote {all,minimal,none,nonnumeric}]
                      [--noindent] [--max-width <integer>]
                      [--fit-width] [--print-empty]
                      [--sort-column SORT_COLUMN] [--name <name>]
                      [--enable | --disable] [--long]
                      [--project <project>]
                      [--project-domain <project-domain>]
                      [--agent <agent-id>] [--tags <tag>[,<tag>,...]]
                      [--any-tags <tag>[,<tag>,...]]
                      [--not-tags <tag>[,<tag>,...]]
                      [--not-any-tags <tag>[,<tag>,...]]
```

Table 69.13. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
--name <name>	List routers according to their name
--enable	List enabled routers
--disable	List disabled routers
--long	List additional fields in output
--project <project>	List routers according to their project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--agent <agent-id>	List routers hosted by an agent (id only)
--tags <tag>[,<tag>,...]	List routers which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List routers which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude routers which have all given tag(s) (comma-separated list of tags)
--not-any-tags <tag>[,<tag>,...]	Exclude routers which have any given tag(s) (comma-separated list of tags)

Table 69.14. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 69.15. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 69.16. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 69.17. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

69.6. ROUTER REMOVE PORT

Remove a port from a router

Usage:

```
openstack router remove port [-h] <router> <port>
```

Table 69.18. Positional Arguments

Value	Summary
<code><router></code>	Router from which port will be removed (name or id)
<code><port></code>	Port to be removed and deleted (name or id)

Table 69.19. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

69.7. ROUTER REMOVE SUBNET

Remove a subnet from a router

Usage:

```
openstack router remove subnet [-h] <router> <subnet>
```

Table 69.20. Positional Arguments

Value	Summary
<router>	Router from which the subnet will be removed (name or id)
<subnet>	Subnet to be removed (name or id)

Table 69.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

69.8. ROUTER SET

Set router properties

Usage:

```
openstack router set [-h] [--name <name>] [--description <description>]
                    [--enable | --disable]
                    [--distributed | --centralized]
                    [--route destination=<subnet>,gateway=<ip-address>]
                    [--no-route] [--ha | --no-ha]
                    [--external-gateway <network>]
                    [--fixed-ip subnet=<subnet>,ip-address=<ip-address>]
                    [--enable-snat | --disable-snat]
                    [--qos-policy <qos-policy> | --no-qos-policy]
                    [--tag <tag>] [--no-tag]
                    <router>
```

Table 69.22. Positional Arguments

Value	Summary
<router>	Router to modify (name or id)

Table 69.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set router name
--description <description>	Set router description
--enable	Enable router
--disable	Disable router
--distributed	Set router to distributed mode (disabled router only)
--centralized	Set router to centralized mode (disabled router only)
--route destination=<subnet>,gateway=<ip-address>	Routes associated with the router destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to set multiple routes)
--no-route	Clear routes associated with the router. specify both --route and --no-route to overwrite current value of route.
--ha	Set the router as highly available (disabled router only)
--no-ha	Clear high availability attribute of the router (disabled router only)
--external-gateway <network>	External network used as router's gateway (name or id)
--fixed-ip subnet=<subnet>,ip-address=<ip-address>	Desired ip and/or subnet (name or id) on external gateway: subnet=<subnet>,ip-address=<ip-address> (repeat option to set multiple fixed IP addresses)
--enable-snat	Enable source nat on external gateway
--disable-snat	Disable source nat on external gateway
--qos-policy <qos-policy>	Attach qos policy to router gateway ips
--no-qos-policy	Remove qos policy from router gateway ips
--tag <tag>	Tag to be added to the router (repeat option to set multiple tags)

Value	Summary
--no-tag	Clear tags associated with the router. specify both --tag and --no-tag to overwrite current tags

69.9. ROUTER SHOW

Display router details

Usage:

```
openstack router show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <router>
```

Table 69.24. Positional Arguments

Value	Summary
<router>	Router to display (name or id)

Table 69.25. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 69.26. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 69.27. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 69.28. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 69.29. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

69.10. ROUTER UNSET

Unset router properties

Usage:

```

openstack router unset [-h]
                        [--route destination=<subnet>,gateway=<ip-address>]
                        [--external-gateway] [--qos-policy]
                        [--tag <tag> | --all-tag]
                        <router>

```

Table 69.30. Positional Arguments

Value	Summary
<router>	Router to modify (name or id)

Table 69.31. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--route destination=<subnet>,gateway=<ip-address>	Routes to be removed from the router destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to unset multiple routes)

Value	Summary
--external-gateway	Remove external gateway information from the router
--qos-policy	Remove qos policy from router gateway ips
--tag <tag>	Tag to be removed from the router (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the router

CHAPTER 70. SECRET

This chapter describes the commands under the **secret** command.

70.1. SECRET CONTAINER CREATE

Store a container in Barbican.

Usage:

```
openstack secret container create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--name NAME]
                                [--type TYPE] [--secret SECRET]
```

Table 70.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME, -n NAME	A human-friendly name.
--type TYPE	Type of container to create (default: generic).
--secret SECRET, -s SECRET	One secret to store in a container (can be set multiple times). Example: --secret "private_key=https://url.test/v1/secrets/1-2-3-4"

Table 70.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 70.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 70.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

70.2. SECRET CONTAINER DELETE

Delete a container by providing its href.

Usage:

```
openstack secret container delete [-h] URI
```

Table 70.6. Positional Arguments

Value	Summary
URI	The uri reference for the container

Table 70.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

70.3. SECRET CONTAINER GET

Retrieve a container by providing its URI.

Usage:

```
openstack secret container get [-h] [-f {json,shell,table,value,yaml}]  
[-c COLUMN] [--noindent]
```

```

[--prefix PREFIX]
[--max-width <integer>] [--fit-width]
[--print-empty]
URI

```

Table 70.8. Positional Arguments

Value	Summary
URI	The uri reference for the container.

Table 70.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 70.10. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 70.11. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.12. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 70.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

70.4. SECRET CONTAINER LIST

List containers.

Usage:

```
openstack secret container list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--limit LIMIT] [--offset OFFSET]
                               [--name NAME] [--type TYPE]
```

Table 70.14. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--limit LIMIT, -l LIMIT</code>	Specify the limit to the number of items to list per page (default: 10; maximum: 100)
<code>--offset OFFSET, -o OFFSET</code>	Specify the page offset (default: 0)
<code>--name NAME, -n NAME</code>	Specify the container name (default: none)
<code>--type TYPE, -t TYPE</code>	Specify the type filter for the list (default: none).

Table 70.15. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 70.16. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 70.17. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.18. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

70.5. SECRET DELETE

Delete a secret by providing its URI.

Usage:

```
openstack secret delete [-h] URI
```

Table 70.19. Positional Arguments

Value	Summary
URI	The uri reference for the secret

Table 70.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

70.6. SECRET GET

Retrieve a secret by providing its URI.

Usage:

```
openstack secret get [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    [--decrypt | --payload | --file <filename>]
                    [--payload_content_type PAYLOAD_CONTENT_TYPE]
                    URI
```

Table 70.21. Positional Arguments

Value	Summary
URI	The uri reference for the secret.

Table 70.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--decrypt, -d	If specified, retrieve the unencrypted secret data.
--payload, -p	If specified, retrieve the unencrypted secret data.
--file <filename>, -F <filename>	If specified, save the payload to a new file with the given filename.
--payload_content_type PAYLOAD_CONTENT_TYPE, -t PAYLOAD_CONTENT_TYPE	The content type of the decrypted secret (default: text/plain).

Table 70.23. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 70.24. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.25. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 70.26. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

70.7. SECRET LIST

List secrets.

Usage:

```
openstack secret list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN] [--limit LIMIT]
```

```

[--offset OFFSET] [--name NAME]
[--algorithm ALGORITHM] [--bit-length BIT_LENGTH]
[--mode MODE] [--secret-type SECRET_TYPE]

```

Table 70.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit LIMIT, -l LIMIT	Specify the limit to the number of items to list per page (default: 10; maximum: 100)
--offset OFFSET, -o OFFSET	Specify the page offset (default: 0)
--name NAME, -n NAME	Specify the secret name (default: none)
--algorithm ALGORITHM, -a ALGORITHM	The algorithm filter for the list (default: none).
--bit-length BIT_LENGTH, -b BIT_LENGTH	The bit length filter for the list (default: 0).
--mode MODE, -m MODE	The algorithm mode filter for the list (default: None).
--secret-type SECRET_TYPE, -s SECRET_TYPE	Specify the secret type (default: none).

Table 70.28. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 70.29. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 70.30. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.31. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

70.8. SECRET ORDER CREATE

Create a new order.

Usage:

```

openstack secret order create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--name NAME] [--algorithm ALGORITHM]
                               [--bit-length BIT_LENGTH] [--mode MODE]
                               [--payload-content-type PAYLOAD_CONTENT_TYPE]
                               [--expiration EXPIRATION]
                               [--request-type REQUEST_TYPE]
                               [--subject-dn SUBJECT_DN]
                               [--source-container-ref SOURCE_CONTAINER_REF]
                               [--ca-id CA_ID] [--profile PROFILE]
                               [--request-file REQUEST_FILE]
                               type

```

Table 70.32. Positional Arguments

Value	Summary
<code>type</code>	The type of the order (key, asymmetric, certificate) to create.

Table 70.33. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME, -n NAME	A human-friendly name.
--algorithm ALGORITHM, -a ALGORITHM	The algorithm to be used with the requested key (default: aes).
--bit-length BIT_LENGTH, -b BIT_LENGTH	The bit length of the requested secret key (default: 256).
--mode MODE, -m MODE	The algorithm mode to be used with the requested key (default: cbc).
--payload-content-type PAYLOAD_CONTENT_TYPE, -t PAYLOAD_CONTENT_TYPE	The type/format of the secret to be generated (default: application/octet-stream).
--expiration EXPIRATION, -x EXPIRATION	The expiration time for the secret in iso 8601 format.
--request-type REQUEST_TYPE	The type of the certificate request.
--subject-dn SUBJECT_DN	The subject of the certificate.
--source-container-ref SOURCE_CONTAINER_REF	The source of the certificate when using stored-key requests.
--ca-id CA_ID	The identifier of the ca to use for the certificate request.
--profile PROFILE	The profile of certificate to use.
--request-file REQUEST_FILE	The file containing the csr.

Table 70.34. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 70.35. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.36. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 70.37. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

70.9. SECRET ORDER DELETE

Delete an order by providing its href.

Usage:

```
openstack secret order delete [-h] URI
```

Table 70.38. Positional Arguments

Value	Summary
URI	The uri reference for the order

Table 70.39. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

70.10. SECRET ORDER GET

Retrieve an order by providing its URI.

Usage:

```
openstack secret order get [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             URI
```

Table 70.40. Positional Arguments

Value	Summary
URI	The uri reference order.

Table 70.41. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 70.42. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 70.43. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 70.44. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 70.45. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

70.11. SECRET ORDER LIST

List orders.

Usage:

```
openstack secret order list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN] [--limit LIMIT]
                             [--offset OFFSET]
```

Table 70.46. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--limit LIMIT, -l LIMIT</code>	Specify the limit to the number of items to list per page (default: 10; maximum: 100)
<code>--offset OFFSET, -o OFFSET</code>	Specify the page offset (default: 0)

Table 70.47. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 70.48. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 70.49. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.50. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

70.12. SECRET STORE

Store a secret in Barbican.

Usage:

```
openstack secret store [-h] [-f {json,shell,table,value,yaml}]
                      [-c COLUMN] [--noindent] [--prefix PREFIX]
                      [--max-width <integer>] [--fit-width]
                      [--print-empty] [--name NAME]
                      [--secret-type SECRET_TYPE]
                      [--payload-content-type PAYLOAD_CONTENT_TYPE]
                      [--payload-content-encoding PAYLOAD_CONTENT_ENCODING]
                      [--algorithm ALGORITHM]
```

```
[--bit-length BIT_LENGTH] [--mode MODE]
[--expiration EXPIRATION]
[--payload PAYLOAD | --file <filename>]
```

Table 70.51. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME, -n NAME	A human-friendly name.
--secret-type SECRET_TYPE, -s SECRET_TYPE	The secret type; must be one of symmetric, public, private, certificate, passphrase, opaque (default)
--payload-content-type PAYLOAD_CONTENT_TYPE, -t PAYLOAD_CONTENT_TYPE	The type/format of the provided secret data; "text/plain" is assumed to be UTF-8; required when - -payload is supplied.
--payload-content-encoding PAYLOAD_CONTENT_ENCODING, -e PAYLOAD_CONTENT_ENCODING	Required if --payload-content-type is "application/octet-stream".
--algorithm ALGORITHM, -a ALGORITHM	The algorithm (default: aes).
--bit-length BIT_LENGTH, -b BIT_LENGTH	The bit length (default: 256).
--mode MODE, -m MODE	The algorithm mode; used only for reference (default: cbc)
--expiration EXPIRATION, -x EXPIRATION	The expiration time for the secret in iso 8601 format.
--payload PAYLOAD, -p PAYLOAD	The unencrypted secret data.
--file <filename>, -F <filename>	File containing the secret payload

Table 70.52. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 70.53. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 70.54. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 70.55. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

70.13. SECRET UPDATE

Update a secret with no payload in Barbican.

Usage:

```
openstack secret update [-h] URI payload
```

Table 70.56. Positional Arguments

Value	Summary
URI	The uri reference for the secret.
payload	The unencrypted secret

Table 70.57. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

CHAPTER 71. SECURITY

This chapter describes the commands under the **security** command.

71.1. SECURITY GROUP CREATE

Create a new security group

Usage:

```
openstack security group create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--description <description>]
                                [--project <project>]
                                [--project-domain <project-domain>]
                                [--tag <tag> | --no-tag]
                                <name>
```

Table 71.1. Positional Arguments

Value	Summary
<name>	New security group name

Table 71.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Security group description
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--tag <tag>	Tag to be added to the security group (repeat option to set multiple tags)
--no-tag	No tags associated with the security group

Table 71.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 71.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 71.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

71.2. SECURITY GROUP DELETE

Delete security group(s)

Usage:

```
openstack security group delete [-h] <group> [<group> ...]
```

Table 71.7. Positional Arguments

Value	Summary
<group>	Security group(s) to delete (name or id)

Table 71.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

71.3. SECURITY GROUP LIST

List security groups

Usage:

```

openstack security group list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--project <project>]
                               [--project-domain <project-domain>]
                               [--tags <tag>[,<tag>,...]]
                               [--any-tags <tag>[,<tag>,...]]
                               [--not-tags <tag>[,<tag>,...]]
                               [--not-any-tags <tag>[,<tag>,...]]

```

Table 71.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	List security groups according to the project (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--tags <tag>[,<tag>,...]	List security group which have all given tag(s) (Comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List security group which have any given tag(s) (Comma-separated list of tags)

Value	Summary
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude security group which have all given tag(s) (Comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude security group which have any given tag(s) (Comma-separated list of tags)

Table 71.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 71.11. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 71.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
<code>--print-empty</code>	Print empty table if there is no data to show.

71.4. SECURITY GROUP RULE CREATE

Create a new security group rule

Usage:

```

openstack security group rule create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--remote-ip <ip-address> | --remote-group <group>]
                                     [--description <description>]
                                     [--dst-port <port-range>]
                                     [--icmp-type <icmp-type>]
                                     [--icmp-code <icmp-code>]
                                     [--protocol <protocol>]
                                     [--ingress | --egress]
                                     [--ethertype <ethertype>]
                                     [--project <project>]
                                     [--project-domain <project-domain>]
                                     <group>

```

Table 71.14. Positional Arguments

Value	Summary
<code><group></code>	Create rule in this security group (name or id)

Table 71.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--remote-ip <ip-address></code>	Remote ip address block (may use cidr notation; default for IPv4 rule: 0.0.0.0/0)
<code>--remote-group <group></code>	Remote security group (name or id)
<code>--description <description></code>	Set security group rule description

Value	Summary
<code>--dst-port <port-range></code>	Destination port, may be a single port or a starting and ending port range: 137:139. Required for IP protocols TCP and UDP. Ignored for ICMP IP protocols.
<code>--icmp-type <icmp-type></code>	Icmp type for icmp ip protocols
<code>--icmp-code <icmp-code></code>	Icmp code for icmp ip protocols
<code>--protocol <protocol></code>	Ip protocol (ah, dccp, ecp, esp, gre, icmp, igmp, ipv6-encap, ipv6-frag, ipv6-icmp, ipv6-nonxt, ipv6-opts, ipv6-route, ospf, pgm, rsvp, sctp, tcp, udp, udplite, vrrp and integer representations [0-255] or any; default: tcp)
<code>--ingress</code>	Rule applies to incoming network traffic (default)
<code>--egress</code>	Rule applies to outgoing network traffic
<code>--ethertype <ethertype></code>	Ethertype of network traffic (ipv4, ipv6; default: based on IP protocol)
<code>--project <project></code>	Owner's project (name or id)
<code>--project-domain <project-domain></code>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 71.16. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 71.17. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 71.19. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

71.5. SECURITY GROUP RULE DELETE

Delete security group rule(s)

Usage:

```
openstack security group rule delete [-h] <rule> [<rule> ...]
```

Table 71.20. Positional Arguments

Value	Summary
<rule>	Security group rule(s) to delete (id only)

Table 71.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

71.6. SECURITY GROUP RULE LIST

List security group rules

Usage:

```
openstack security group rule list [-h]
                                  [-f {csv,json,table,value,yaml}]
```

```

[-c COLUMN]
[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--protocol <protocol>]
[--ingress | --egress] [--long]
[<group>]

```

Table 71.22. Positional Arguments

Value	Summary
<group>	List all rules in this security group (name or id)

Table 71.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--protocol <protocol>	List rules by the ip protocol (ah, dhcp, egp, esp, gre, icmp, igmp, ipv6-encap, ipv6-frag, ipv6-icmp, ipv6-nonxt, ipv6-opts, ipv6-route, ospf, pgm, rsvp, sctp, tcp, udp, udplite, vrrp and integer representations [0-255]).
--ingress	List rules applied to incoming network traffic
--egress	List rules applied to outgoing network traffic
--long	List additional fields in output

Table 71.24. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 71.25. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 71.26. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 71.27. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

71.7. SECURITY GROUP RULE SHOW

Display security group rule details

Usage:

```
openstack security group rule show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]
                                  [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  <rule>
```

Table 71.28. Positional Arguments

Value	Summary
<code><rule></code>	Security group rule to display (id only)

Table 71.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 71.30. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 71.31. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.32. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 71.33. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

71.8. SECURITY GROUP SET

Set security group properties

Usage:

-

```

openstack security group set [-h] [--name <new-name>]
                             [--description <description>]
                             [--tag <tag>] [--no-tag]
                             <group>

```

Table 71.34. Positional Arguments

Value	Summary
<group>	Security group to modify (name or id)

Table 71.35. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <new-name>	New security group name
--description <description>	New security group description
--tag <tag>	Tag to be added to the security group (repeat option to set multiple tags)
--no-tag	Clear tags associated with the security group. specify both --tag and --no-tag to overwrite current tags

71.9. SECURITY GROUP SHOW

Display security group details

Usage:

```

openstack security group show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               <group>

```

Table 71.36. Positional Arguments

Value	Summary
<group>	Security group to display (name or id)

Table 71.37. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 71.38. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 71.39. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 71.40. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 71.41. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

71.10. SECURITY GROUP UNSET

Unset security group properties

Usage:

■

```
openstack security group unset [-h] [--tag <tag> | --all-tag] <group>
```

Table 71.42. Positional Arguments

Value	Summary
<group>	Security group to modify (name or id)

Table 71.43. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--tag <tag>	Tag to be removed from the security group (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the security group

CHAPTER 72. SERVER

This chapter describes the commands under the **server** command.

72.1. SERVER ADD FIXED IP

Add fixed IP address to server

Usage:

```
openstack server add fixed ip [-h] [--fixed-ip-address <ip-address>]
                               <server> <network>
```

Table 72.1. Positional Arguments

Value	Summary
<server>	Server to receive the fixed ip address (name or id)
<network>	Network to allocate the fixed ip address from (name or ID)

Table 72.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fixed-ip-address <ip-address>	Requested fixed ip address

72.2. SERVER ADD FLOATING IP

Add floating IP address to server

Usage:

```
openstack server add floating ip [-h] [--fixed-ip-address <ip-address>]
                                   <server> <ip-address>
```

Table 72.3. Positional Arguments

Value	Summary
<server>	Server to receive the floating ip address (name or id)
<ip-address>	Floating ip address to assign to the first available server port (IP only)

Table 72.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--fixed-ip-address <ip-address>	Fixed ip address to associate with this floating ip address. The first server port containing the fixed IP address will be used

72.3. SERVER ADD NETWORK

Add network to server

Usage:

```
openstack server add network [-h] <server> <network>
```

Table 72.5. Positional Arguments

Value	Summary
<server>	Server to add the network to (name or id)
<network>	Network to add to the server (name or id)

Table 72.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.4. SERVER ADD PORT

Add port to server

Usage:

```
openstack server add port [-h] <server> <port>
```

Table 72.7. Positional Arguments

Value	Summary
<server>	Server to add the port to (name or id)
<port>	Port to add to the server (name or id)

Table 72.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.5. SERVER ADD SECURITY GROUP

Add security group to server

Usage:

```
openstack server add security group [-h] <server> <group>
```

Table 72.9. Positional Arguments

Value	Summary
<server>	Server (name or id)
<group>	Security group to add (name or id)

Table 72.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.6. SERVER ADD VOLUME

Add volume to server

Usage:

```
openstack server add volume [-h] [--device <device>] <server> <volume>
```

Table 72.11. Positional Arguments

Value	Summary
<server>	Server (name or id)
<volume>	Volume to add (name or id)

Table 72.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--device <device>	Server internal device name for volume

72.7. SERVER BACKUP CREATE

Create a server backup image

Usage:

```
openstack server backup create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--name <image-name>]
                               [--type <backup-type>]
                               [--rotate <count>] [--wait]
                               <server>
```

Table 72.13. Positional Arguments

Value	Summary
<server>	Server to back up (name or id)

Table 72.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <image-name>	Name of the backup image (default: server name)
--type <backup-type>	Used to populate the backup_type property of the backup image (default: empty)
--rotate <count>	Number of backups to keep (default: 1)
--wait	Wait for backup image create to complete

Table 72.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.17. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 72.18. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.8. SERVER CREATE

Create a new server

Usage:

```
openstack server create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
```

```

(--image <image> | --image-property <key=value> | --volume <volume>)
--flavor <flavor>
[--security-group <security-group>]
[--key-name <key-name>]
[--property <key=value>]
[--file <dest-filename=source-filename>]
[--user-data <user-data>]
[--availability-zone <zone-name>]
[--block-device-mapping <dev-name=mapping>]
[--nic <net-id=net-uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-addr,port-id=port-
uuid,auto,none>]
[--network <network>] [--port <port>]
[--hint <key=value>]
[--config-drive <config-drive-volume>|True]
[--min <count>] [--max <count>] [--wait]
<server-name>

```

Table 72.19. Positional Arguments

Value	Summary
<server-name>	New server name

Table 72.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--image <image>	Create server boot disk from this image (name or id)
--image-property <key=value>	Image property to be matched
--volume <volume>	Create server using this volume as the boot disk (name or ID). This option automatically creates a block device mapping with a boot index of 0. On many hypervisors (libvirt/kvm for example) this will be device vda. Do not create a duplicate mapping using --block-device-mapping for this volume.
--flavor <flavor>	Create server with this flavor (name or id)
--security-group <security-group>	Security group to assign to this server (name or id) (repeat option to set multiple groups)
--key-name <key-name>	Keypair to inject into this server (optional extension)
--property <key=value>	Set a property on this server (repeat option to set multiple values)

Value	Summary
<code>--file <dest-filename=source-filename></code>	File to inject into image before boot (repeat option to set multiple files)
<code>--user-data <user-data></code>	User data file to serve from the metadata server
<code>--availability-zone <zone-name></code>	Select an availability zone for the server
<code>--block-device-mapping <dev-name=mapping></code>	Create a block device on the server. Block device mapping in the format <code><dev-name>=<id>:<type>:<size(GB)>:<delete-on-terminate></code> <code><dev-name></code> : block device name, like: <code>vdb</code> , <code>xvdc</code> (required) <code><id></code> : UUID of the volume or snapshot (required) <code><type></code> : volume or snapshot; default: volume (optional) <code><size(GB)></code> : volume size if create from snapshot (optional) <code><delete-on-terminate></code> : true or false; default: false (optional) (optional extension)
<code>--nic <net-id=net-uuid,v4-fixed-ip=ip-addr,v6-fixed-ip=ip-addr,port-id=port-uuid,auto,none></code>	Create a nic on the server. specify option multiple times to create multiple NICs. Either <code>net-id</code> or <code>port-id</code> must be provided, but not both. <code>net-id</code> : attach NIC to network with this UUID, <code>port-id</code> : attach NIC to port with this UUID, <code>v4-fixed-ip</code> : IPv4 fixed address for NIC (optional), <code>v6-fixed-ip</code> : IPv6 fixed address for NIC (optional), <code>none</code> : (v2.37+) no network is attached, <code>auto</code> : (v2.37+) the compute service will automatically allocate a network. Specifying a <code>--nic</code> of <code>auto</code> or <code>none</code> cannot be used with any other <code>--nic</code> value.
<code>--network <network></code>	Create a nic on the server and connect it to network. Specify option multiple times to create multiple NICs. This is a wrapper for the <code>--nic net-id=<network></code> parameter that provides simple syntax for the standard use case of connecting a new server to a given network. For more advanced use cases, refer to the <code>--nic</code> parameter.
<code>--port <port></code>	Create a nic on the server and connect it to port. Specify option multiple times to create multiple NICs. This is a wrapper for the <code>--nic port-id=<port></code> parameter that provides simple syntax for the standard use case of connecting a new server to a given port. For more advanced use cases, refer to the <code>--nic</code> parameter.
<code>--hint <key=value></code>	Hints for the scheduler (optional extension)
<code>--config-drive <config-drive-volume></code>	True

Value	Summary
Use specified volume as the config drive, or <i>true</i> to use an ephemeral drive	--min <count>
Minimum number of servers to launch (default=1)	--max <count>
Maximum number of servers to launch (default=1)	--wait

Table 72.21. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.22. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.23. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 72.24. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.9. SERVER DELETE

Delete server(s)

Usage:

```
openstack server delete [-h] [--wait] <server> [<server> ...]
```

Table 72.25. Positional Arguments

Value	Summary
<server>	Server(s) to delete (name or id)

Table 72.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for delete to complete

72.10. SERVER DUMP CREATE

Create a dump file in server(s) Trigger crash dump in server(s) with features like kdump in Linux. It will create a dump file in the server(s) dumping the server(s)' memory, and also crash the server(s). OSC sees the dump file (server dump) as a kind of resource.

Usage:

```
openstack server dump create [-h] <server> [<server> ...]
```

Table 72.27. Positional Arguments

Value	Summary
<server>	Server(s) to create dump file (name or id)

Table 72.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.11. SERVER EVENT LIST

List recent events of a server

Usage:

```

openstack server event list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN] [--long]
                             <server>

```

Table 72.29. Positional Arguments

Value	Summary
<server>	Server to list events (name or id)

Table 72.30. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 72.31. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 72.32. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 72.33. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.34. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.12. SERVER EVENT SHOW

Show server event details. Specify ``--os-compute-api-version 2.51`` or higher to show events for non-admin users.

Usage:

```
openstack server event show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <server> <request-id>
```

Table 72.35. Positional Arguments

Value	Summary
<server>	Server to show event details (name or id)
<request-id>	Request id of the event to show (id only)

Table 72.36. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 72.37. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.38. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.39. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 72.40. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.13. SERVER GROUP CREATE

Create a new server group.

Usage:

```
openstack server group create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--policy <policy>]
                             <name>
```

Table 72.41. Positional Arguments

Value	Summary
<name>	New server group name

Table 72.42. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--policy <policy>	Add a policy to <name> (<i>affinity</i> or <i>anti-affinity</i> , defaults to <i>affinity</i>). Specify <code>--os-compute-api-version 2.15</code> or higher for the <i>soft-affinity</i> or <i>soft-anti-affinity</i> policy.

Table 72.43. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.44. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.45. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 72.46. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.14. SERVER GROUP DELETE

Delete existing server group(s).

Usage:

```
openstack server group delete [-h] <server-group> [<server-group> ...]
```

Table 72.47. Positional Arguments

Value	Summary
<server-group>	Server group(s) to delete (name or id)

Table 72.48. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.15. SERVER GROUP LIST

List all server groups.

Usage:

```
openstack server group list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--all-projects] [--long]
```

Table 72.49. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
--all-projects	Display information from all projects (admin only)
--long	List additional fields in output

Table 72.50. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 72.51. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 72.52. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.53. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.16. SERVER GROUP SHOW

Display server group details.

Usage:

```
openstack server group show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <server-group>
```

Table 72.54. Positional Arguments

Value	Summary
<server-group>	Server group to display (name or id)

Table 72.55. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 72.56. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.57. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.58. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 72.59. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

72.17. SERVER IMAGE CREATE

Create a new server disk image from an existing server

Usage:

```
openstack server image create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--name <image-name>] [--wait]
                             <server>
```

Table 72.60. Positional Arguments

Value	Summary
<code><server></code>	Server to create image (name or id)

Table 72.61. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <image-name></code>	Name of new disk image (default: server name)
<code>--wait</code>	Wait for operation to complete

Table 72.62. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.63. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.64. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 72.65. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.18. SERVER LIST

List servers

Usage:

```
openstack server list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent] [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]
    [--reservation-id <reservation-id>]
    [--ip <ip-address-regex>]
    [--ip6 <ip-address-regex>] [--name <name-regex>]
    [--instance-name <server-name>]
    [--status <status>] [--flavor <flavor>]
    [--image <image>] [--host <hostname>]
```

```

[--all-projects] [--project <project>]
[--project-domain <project-domain>]
[--user <user>] [--user-domain <user-domain>]
[--long] [-n | --name-lookup-one-by-one]
[--marker <server>] [--limit <num-servers>]
[--deleted] [--changes-since <changes-since>]

```

Table 72.66. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--reservation-id <reservation-id>	Only return instances that match the reservation
--ip <ip-address-regex>	Regular expression to match ip addresses
--ip6 <ip-address-regex>	Regular expression to match ipv6 addresses. note that this option only applies for non-admin users when using ``--os-compute-api-version`` 2.5 or greater.
--name <name-regex>	Regular expression to match names
--instance-name <server-name>	Regular expression to match instance name (admin only)
--status <status>	Search by server status
--flavor <flavor>	Search by flavor (name or id)
--image <image>	Search by image (name or id)
--host <hostname>	Search by hostname
--all-projects	Include all projects (admin only)
--project <project>	Search by project (admin only) (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--user <user>	Search by user (admin only) (name or id)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--long	List additional fields in output

Value	Summary
<code>-n, --no-name-lookup</code>	Skip flavor and image name lookup. mutually exclusive with " <code>--name-lookup-one-by-one</code> " option.
<code>--name-lookup-one-by-one</code>	When looking up flavor and image names, look them up one by one as needed instead of all together (default). Mutually exclusive with " <code>--no-name-lookup</code> " option.
<code>-n</code> option.	<code>--marker <server></code>
The last server of the previous page. display list of servers after marker. Display all servers if not specified. (name or ID)	<code>--limit <num-servers></code>
Maximum number of servers to display. if limit equals -1, all servers will be displayed. If limit is greater than <code>osapi_max_limit</code> option of Nova API, <code>osapi_max_limit</code> will be used instead.	<code>--deleted</code>
Only display deleted servers (admin only).	<code>--changes-since <changes-since></code>

Table 72.67. Output Formatters

Value	Summary
output formatter options-f { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 72.68. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 72.69. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.70. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.19. SERVER LOCK

Lock server(s). A non-admin user will not be able to execute actions

Usage:

```
openstack server lock [-h] <server> [<server> ...]
```

Table 72.71. Positional Arguments

Value	Summary
<server>	Server(s) to lock (name or id)

Table 72.72. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.20. SERVER MIGRATE

Migrate server to different host

Usage:

```
openstack server migrate [-h] [--live <hostname>]
                        [--shared-migration | --block-migration]
                        [--disk-overcommit | --no-disk-overcommit]
```

```
[--wait]
<server>
```

Table 72.73. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.74. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--live <hostname>	Target hostname
--shared-migration	Perform a shared live migration (default)
--block-migration	Perform a block live migration
--disk-overcommit	Allow disk over-commit on the destination host
--no-disk-overcommit	Do not over-commit disk on the destination host (default)
--wait	Wait for migrate to complete

72.21. SERVER PAUSE

Pause server(s)

Usage:

```
openstack server pause [-h] <server> [<server> ...]
```

Table 72.75. Positional Arguments

Value	Summary
<server>	Server(s) to pause (name or id)

Table 72.76. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.22. SERVER REBOOT

Perform a hard or soft server reboot

Usage:

```
openstack server reboot [-h] [--hard | --soft] [--wait] <server>
```

Table 72.77. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.78. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--hard	Perform a hard reboot
--soft	Perform a soft reboot
--wait	Wait for reboot to complete

72.23. SERVER REBUILD

Rebuild server

Usage:

```
openstack server rebuild [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--image <image>]
                        [--password <password>]
                        [--property <key=value>] [--wait]
                        [--key-name <key-name> | --key-unset]
                        <server>
```

Table 72.79. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.80. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--image <image>	Recreate server from the specified image (name or id). Defaults to the currently used one.
--password <password>	Set the password on the rebuilt instance
--property <key=value>	Set a property on the rebuilt instance (repeat option to set multiple values)
--wait	Wait for rebuild to complete
--key-name <key-name>	Set the key name of key pair on the rebuilt instance. Cannot be specified with the <code>--key-unset</code> option. (Supported by API versions 2.54 - 2.latest)
--key-unset	Unset the key name of key pair on the rebuilt instance. Cannot be specified with the <code>--key-name</code> option. (Supported by API versions 2.54 - 2.latest)

Table 72.81. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.82. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.83. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 72.84. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

72.24. SERVER REMOVE FIXED IP

Remove fixed IP address from server

Usage:

```
openstack server remove fixed ip [-h] <server> <ip-address>
```

Table 72.85. Positional Arguments

Value	Summary
<code><server></code>	Server to remove the fixed ip address from (name or id)
<code><ip-address></code>	Fixed ip address to remove from the server (ip only)

Table 72.86. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

72.25. SERVER REMOVE FLOATING IP

Remove floating IP address from server

Usage:

```
openstack server remove floating ip [-h] <server> <ip-address>
```

Table 72.87. Positional Arguments

Value	Summary
<server>	Server to remove the floating ip address from (name or id)
<ip-address>	Floating ip address to remove from server (ip only)

Table 72.88. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.26. SERVER REMOVE NETWORK

Remove all ports of a network from server

Usage:

```
openstack server remove network [-h] <server> <network>
```

Table 72.89. Positional Arguments

Value	Summary
<server>	Server to remove the port from (name or id)
<network>	Network to remove from the server (name or id)

Table 72.90. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.27. SERVER REMOVE PORT

Remove port from server

Usage:

```
openstack server remove port [-h] <server> <port>
```

Table 72.91. Positional Arguments

Value	Summary
<server>	Server to remove the port from (name or id)
<port>	Port to remove from the server (name or id)

Table 72.92. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.28. SERVER REMOVE SECURITY GROUP

Remove security group from server

Usage:

```
openstack server remove security group [-h] <server> <group>
```

Table 72.93. Positional Arguments

Value	Summary
<server>	Name or id of server to use
<group>	Name or id of security group to remove from server

Table 72.94. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.29. SERVER REMOVE VOLUME

Remove volume from server

Usage:

```
openstack server remove volume [-h] <server> <volume>
```

Table 72.95. Positional Arguments

Value	Summary
<server>	Server (name or id)
<volume>	Volume to remove (name or id)

Table 72.96. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.30. SERVER RESCUE

Put server in rescue mode

Usage:

```
openstack server rescue [-h] [--image <image>] [--password <password>]
                        <server>
```

Table 72.97. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.98. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--image <image>	Image (name or id) to use for the rescue mode. Defaults to the currently used one.
--password <password>	Set the password on the rescued instance

72.31. SERVER RESIZE

Scale server to a new flavor. A resize operation is implemented by creating a new server and copying the contents of the original disk into a new one. It is also a two-step process for the user: the first is to perform the resize, the second is to either confirm (verify) success and release the old server, or to declare a revert to release the new server and restart the old one.

Usage:

```
openstack server resize [-h] [--flavor <flavor> | --confirm | --revert]
                        [--wait]
                        <server>
```

Table 72.99. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.100. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--flavor <flavor>	Resize server to specified flavor
--confirm	Confirm server resize is complete
--revert	Restore server state before resize
--wait	Wait for resize to complete

72.32. SERVER RESTORE

Restore server(s)

Usage:

```
openstack server restore [-h] <server> [<server> ...]
```

Table 72.101. Positional Arguments

Value	Summary
<server>	Server(s) to restore (name or id)

Table 72.102. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.33. SERVER RESUME

Resume server(s)

Usage:

```
openstack server resume [-h] <server> [<server> ...]
```

Table 72.103. Positional Arguments

Value	Summary
<server>	Server(s) to resume (name or id)

Table 72.104. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.34. SERVER SET

Set server properties

Usage:

```
openstack server set [-h] [--name <new-name>] [--root-password]
                    [--property <key=value>] [--state <state>]
                    <server>
```

Table 72.105. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.106. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <new-name>	New server name
--root-password	Set new root password (interactive only)
--property <key=value>	Property to add/change for this server (repeat option to set multiple properties)
--state <state>	New server state (valid value: active, error)

72.35. SERVER SHELVE

Shelve server(s)

Usage:

```
openstack server shelve [-h] <server> [<server> ...]
```

Table 72.107. Positional Arguments

Value	Summary
<server>	Server(s) to shelve (name or id)

Table 72.108. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.36. SERVER SHOW

Show server details. Specify ``--os-compute-api-version 2.47`` or higher to see the embedded flavor information for the server.

Usage:

```
openstack server show [-h] [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent] [--prefix PREFIX]
    [--max-width <integer>] [--fit-width]
    [--print-empty] [--diagnostics]
    <server>
```

Table 72.109. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.110. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--diagnostics	Display server diagnostics information

Table 72.111. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 72.112. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 72.113. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 72.114. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

72.37. SERVER SSH

SSH to server

Usage:

```
openstack server ssh [-h] [--login <login-name>] [--port <port>]
                    [--identity <keyfile>] [--option <config-options>]
                    [-4 | -6]
                    [--public | --private | --address-type <address-type>]
                    <server>
```

Table 72.115. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.116. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--login <login-name>	Login name (ssh -l option)
--port <port>	Destination port (ssh -p option)
--identity <keyfile>	Private key file (ssh -i option)
--option <config-options>	Options in ssh_config(5) format (ssh -o option)
-4	Use only ipv4 addresses
-6	Use only ipv6 addresses
--public	Use public ip address
--private	Use private ip address
--address-type <address-type>	Use other ip address (public, private, etc)

72.38. SERVER START

Start server(s).

Usage:

```
openstack server start [-h] <server> [<server> ...]
```

Table 72.117. Positional Arguments

Value	Summary
<server>	Server(s) to start (name or id)

Table 72.118. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.39. SERVER STOP

Stop server(s).

Usage:

```
openstack server stop [-h] <server> [<server> ...]
```

Table 72.119. Positional Arguments

Value	Summary
<server>	Server(s) to stop (name or id)

Table 72.120. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.40. SERVER SUSPEND

Suspend server(s)

Usage:

```
openstack server suspend [-h] <server> [<server> ...]
```

Table 72.121. Positional Arguments

Value	Summary
<server>	Server(s) to suspend (name or id)

Table 72.122. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.41. SERVER UNLOCK

Unlock server(s)

Usage:

```
openstack server unlock [-h] <server> [<server> ...]
```

Table 72.123. Positional Arguments

Value	Summary
<server>	Server(s) to unlock (name or id)

Table 72.124. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.42. SERVER UNPAUSE

Unpause server(s)

Usage:

```
openstack server unpause [-h] <server> [<server> ...]
```

Table 72.125. Positional Arguments

Value	Summary
<server>	Server(s) to unpause (name or id)

Table 72.126. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.43. SERVER UNRESCUE

Restore server from rescue mode

Usage:

```
openstack server unrescue [-h] <server>
```

Table 72.127. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.128. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

72.44. SERVER UNSET

Unset server properties

Usage:

```
openstack server unset [-h] [--property <key>] <server>
```

Table 72.129. Positional Arguments

Value	Summary
<server>	Server (name or id)

Table 72.130. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property key to remove from server (repeat option to remove multiple values)

72.45. SERVER UNSHELVE

Unshelve server(s)

Usage:

```
openstack server unshelve [-h] <server> [<server> ...]
```

Table 72.131. Positional Arguments

Value	Summary
<server>	Server(s) to unshelve (name or id)

Table 72.132. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

CHAPTER 73. SERVICE

This chapter describes the commands under the **service** command.

73.1. SERVICE CREATE

Create new service

Usage:

```
openstack service create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--name <name>]
                        [--description <description>]
                        [--enable | --disable]
                        <type>
```

Table 73.1. Positional Arguments

Value	Summary
<type>	New service type (compute, image, identity, volume, etc)

Table 73.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New service name
--description <description>	New service description
--enable	Enable service (default)
--disable	Disable service

Table 73.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 73.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.5. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 73.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

73.2. SERVICE DELETE

Delete service(s)

Usage:

```
openstack service delete [-h] <service> [<service> ...]
```

Table 73.7. Positional Arguments

Value	Summary
<code><service></code>	Service(s) to delete (type, name or id)

Table 73.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

73.3. SERVICE LIST

List services

Usage:

```
openstack service list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--long]
```

Table 73.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 73.10. Output Formatters

Value	Summary
output formatter options- f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 73.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 73.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

73.4. SERVICE PROVIDER CREATE

Create new service provider

Usage:

```
openstack service provider create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] --auth-url <auth-url>
                                [--description <description>]
                                --service-provider-url <sp-url>
                                [--enable | --disable]
                                <name>
```

Table 73.14. Positional Arguments

Value	Summary
<code><name></code>	New service provider name (must be unique)

Table 73.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--auth-url <auth-url></code>	Authentication url of remote federated service provider (required)
<code>--description <description></code>	New service provider description
<code>--service-provider-url <sp-url></code>	A service url where saml assertions are being sent (required)

Value	Summary
<code>--enable</code>	Enable the service provider (default)
<code>--disable</code>	Disable the service provider

Table 73.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 73.17. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 73.19. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

73.5. SERVICE PROVIDER DELETE

Delete service provider(s)

Usage:

```
openstack service provider delete [-h]
                                <service-provider>
                                [<service-provider> ...]
```

Table 73.20. Positional Arguments

Value	Summary
<service-provider>	Service provider(s) to delete

Table 73.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

73.6. SERVICE PROVIDER LIST

List service providers

Usage:

```
openstack service provider list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
```

Table 73.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.23. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 73.24. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 73.25. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 73.26. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

73.7. SERVICE PROVIDER SET

Set service provider properties

Usage:

```

openstack service provider set [-h] [--auth-url <auth-url>]
                               [--description <description>]
                               [--service-provider-url <sp-url>]
                               [--enable | --disable]
                               <service-provider>

```

Table 73.27. Positional Arguments

Value	Summary
<service-provider>	Service provider to modify

Table 73.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--auth-url <auth-url>	New authentication url of remote federated service provider
--description <description>	New service provider description
--service-provider-url <sp-url>	New service provider url, where saml assertions are sent
--enable	Enable the service provider
--disable	Disable the service provider

73.8. SERVICE PROVIDER SHOW

Display service provider details

Usage:

```
openstack service provider show [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <service-provider>
```

Table 73.29. Positional Arguments

Value	Summary
<service-provider>	Service provider to display

Table 73.30. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.31. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 73.32. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.33. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 73.34. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

73.9. SERVICE SET

Set service properties

Usage:

```
openstack service set [-h] [--type <type>] [--name <service-name>]
                      [--description <description>]
                      [--enable | --disable]
                      <service>
```

Table 73.35. Positional Arguments

Value	Summary
<service>	Service to modify (type, name or id)

Table 73.36. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--type <type>	New service type (compute, image, identity, volume, etc)
--name <service-name>	New service name
--description <description>	New service description
--enable	Enable service
--disable	Disable service

73.10. SERVICE SHOW

Display service details

Usage:

```
openstack service show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <service>
```

Table 73.37. Positional Arguments

Value	Summary
<service>	Service to display (type, name or id)

Table 73.38. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 73.39. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 73.40. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 73.41. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 73.42. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 74. SFC

This chapter describes the commands under the **sfc** command.

74.1. SFC FLOW CLASSIFIER CREATE

Create a flow classifier

Usage:

```
openstack sfc flow classifier create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--description <description>]
                                   [--protocol <protocol>]
                                   [--ethertype {IPv4,IPv6}]
                                   [--source-port <min-port>:<max-port>]
                                   [--destination-port <min-port>:<max-port>]
                                   [--source-ip-prefix <source-ip-prefix>]
                                   [--destination-ip-prefix <destination-ip-prefix>]
                                   [--logical-source-port <logical-source-port>]
                                   [--logical-destination-port <logical-destination-port>]
                                   [--l7-parameters L7_PARAMETERS]
                                   <name>
```

Table 74.1. Positional Arguments

Value	Summary
<name>	Name of the flow classifier

Table 74.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description for the flow classifier
--protocol <protocol>	Ip protocol name. protocol name should be as per iana standard.
--ethertype {IPv4,IPv6}	L2 ethertype, default is ipv4
--source-port <min-port>:<max-port>	Source protocol port (allowed range [1,65535]. must be specified as a:b, where a=min-port and b=max-port) in the allowed range.

Value	Summary
<code>--destination-port <min-port>:<max-port></code>	Destination protocol port (allowed range [1,65535]. Must be specified as a:b, where a=min-port and b=max- port) in the allowed range.
<code>--source-ip-prefix <source-ip-prefix></code>	Source ip address in cidr notation
<code>--destination-ip-prefix <destination-ip-prefix></code>	Destination ip address in cidr notation
<code>--logical-source-port <logical-source-port></code>	Neutron source port (name or id)
<code>--logical-destination-port <logical-destination-port></code>	Neutron destination port (name or id)
<code>--l7-parameters L7_PARAMETERS</code>	Dictionary of l7 parameters. currently, no value is supported for this option.

Table 74.3. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.5. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 74.6. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

74.2. SFC FLOW CLASSIFIER DELETE

Delete a given flow classifier

Usage:

```
openstack sfc flow classifier delete [-h] <flow-classifier>
```

Table 74.7. Positional Arguments

Value	Summary
<code><flow-classifier></code>	Flow classifier to delete (name or id)

Table 74.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

74.3. SFC FLOW CLASSIFIER LIST

List flow classifiers

Usage:

```
openstack sfc flow classifier list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN] [--long]
```

Table 74.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 74.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 74.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.4. SFC FLOW CLASSIFIER SET

Set flow classifier properties

Usage:

```
openstack sfc flow classifier set [-h] [--name <name>]
                                [--description <description>]
                                <flow-classifier>
```

Table 74.14. Positional Arguments

Value	Summary
<flow-classifier>	Flow classifier to modify (name or id)

Table 74.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the flow classifier
--description <description>	Description for the flow classifier

74.5. SFC FLOW CLASSIFIER SHOW

Display flow classifier details

Usage:

```
openstack sfc flow classifier show [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   <flow-classifier>
```

Table 74.16. Positional Arguments

Value	Summary
<flow-classifier>	Flow classifier to display (name or id)

Table 74.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 74.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 74.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.6. SFC PORT CHAIN CREATE

Create a port chain

Usage:

■

```

openstack sfc port chain create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--description <description>]
                                [--flow-classifier <flow-classifier>]
                                [--chain-parameters correlation=<correlation-type>,symmetric=<boolean>]
                                --port-pair-group <port-pair-group>
                                <name>

```

Table 74.22. Positional Arguments

Value	Summary
<name>	Name of the port chain

Table 74.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description for the port chain
--flow-classifier <flow-classifier>	Add flow classifier (name or id). this option can be repeated.
--chain-parameters correlation=<correlation-type>,symmetric=<boolean>	Dictionary of chain parameters. supports correlation=(mpls
nsh) (default is mpls) and symmetric=(true	false).
--port-pair-group <port-pair-group>	Add port pair group (name or id). this option can be repeated.

Table 74.24. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.25. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.26. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 74.27. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

74.7. SFC PORT CHAIN DELETE

Delete a given port chain

Usage:

```
openstack sfc port chain delete [-h] <port-chain>
```

Table 74.28. Positional Arguments

Value	Summary
<code><port-chain></code>	Port chain to delete (name or id)

Table 74.29. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

74.8. SFC PORT CHAIN LIST

List port chains

Usage:

```
openstack sfc port chain list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN] [--long]
```

Table 74.30. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 74.31. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.32. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 74.33. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.34. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

74.9. SFC PORT CHAIN SET

Set port chain properties

Usage:

```
openstack sfc port chain set [-h] [--name <name>]
                             [--description <description>]
                             [--flow-classifier <flow-classifier>]
                             [--no-flow-classifier]
                             [--port-pair-group <port-pair-group>]
                             [--no-port-pair-group]
                             <port-chain>
```

Table 74.35. Positional Arguments

Value	Summary
<code><port-chain></code>	Port chain to modify (name or id)

Table 74.36. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--name <name></code>	Name of the port chain
<code>--description <description></code>	Description for the port chain
<code>--flow-classifier <flow-classifier></code>	Add flow classifier (name or id). this option can be repeated.
<code>--no-flow-classifier</code>	Remove associated flow classifiers from the port chain

Value	Summary
<code>--port-pair-group <port-pair-group></code>	Add port pair group (name or id). current port pair groups order is kept, the added port pair group will be placed at the end of the port chain. This option can be repeated.
<code>--no-port-pair-group</code>	Remove associated port pair groups from the port chain. At least one <code>--port-pair-group</code> must be specified together.

74.10. SFC PORT CHAIN SHOW

Display port chain details

Usage:

```
openstack sfc port chain show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             <port-chain>
```

Table 74.37. Positional Arguments

Value	Summary
<code><port-chain></code>	Port chain to display (name or id)

Table 74.38. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 74.39. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.40. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.41. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 74.42. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

74.11. SFC PORT CHAIN UNSET

Unset port chain properties

Usage:

```
openstack sfc port chain unset [-h]
                               [--flow-classifier <flow-classifier> | --all-flow-classifier]
                               [--port-pair-group <port-pair-group>]
                               <port-chain>
```

Table 74.43. Positional Arguments

Value	Summary
<code><port-chain></code>	Port chain to unset (name or id)

Table 74.44. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
<code>--flow-classifier <flow-classifier></code>	Remove flow classifier(s) from the port chain (name or ID). This option can be repeated.
<code>--all-flow-classifier</code>	Remove all flow classifiers from the port chain
<code>--port-pair-group <port-pair-group></code>	Remove port pair group(s) from the port chain (name or ID). This option can be repeated.

74.12. SFC PORT PAIR CREATE

Create a port pair

Usage:

```
openstack sfc port pair create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               [--description <description>]
                               [--service-function-parameters correlation=<correlation-type>,weight=
<weight>]
                               --ingress <ingress> --egress <egress>
                               <name>
```

Table 74.45. Positional Arguments

Value	Summary
<code><name></code>	Name of the port pair

Table 74.46. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--description <description></code>	Description for the port pair
<code>--service-function-parameters correlation=<correlation-type>,weight=<weight></code>	Dictionary of service function parameters. currently, correlation=(None
<code>mpls</code>	nsh) and weight are supported. Weight is an integer that influences the selection of a port pair within a port pair group for a flow. The higher the weight, the more flows will hash to the port pair. The default weight is 1.

Value	Summary
<code>--ingress <ingress></code>	Ingress neutron port (name or id)
<code>--egress <egress></code>	Egress neutron port (name or id)

Table 74.47. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.48. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.49. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 74.50. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

74.13. SFC PORT PAIR DELETE

Delete a given port pair

Usage:

```
openstack sfc port pair delete [-h] <port-pair>
```

Table 74.51. Positional Arguments

Value	Summary
<port-pair>	Port pair to delete (name or id)

Table 74.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

74.14. SFC PORT PAIR GROUP CREATE

Create a port pair group

Usage:

```
openstack sfc port pair group create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--description <description>]
                                     [--port-pair <port-pair>]
                                     [--enable-tap | --disable-tap]
                                     [--port-pair-group-parameters lb-fields=<lb-fields>]
                                     <name>
```

Table 74.53. Positional Arguments

Value	Summary
<name>	Name of the port pair group

Table 74.54. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Description for the port pair group

Value	Summary
<code>--port-pair <port-pair></code>	Port pair (name or id). this option can be repeated.
<code>--enable-tap</code>	Port pairs of this port pair group are deployed as passive tap service function
<code>--disable-tap</code>	Port pairs of this port pair group are deployed as l3 service function (default)
<code>--port-pair-group-parameters lb-fields=<lb-fields></code>	Dictionary of port pair group parameters. currently only one parameter lb-fields is supported. <lb-fields> is a & separated list of load-balancing fields.

Table 74.55. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 74.56. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 74.57. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 74.58. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.15. SFC PORT PAIR GROUP DELETE

Delete a given port pair group

Usage:

```
openstack sfc port pair group delete [-h] <port-pair-group>
```

Table 74.59. Positional Arguments

Value	Summary
<port-pair-group>	Port pair group to delete (name or id)

Table 74.60. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

74.16. SFC PORT PAIR GROUP LIST

List port pair group

Usage:

```
openstack sfc port pair group list [-h]
                                [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN] [--long]
```

Table 74.61. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 74.62. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.63. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 74.64. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.65. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.17. SFC PORT PAIR GROUP SET

Set port pair group properties

Usage:

```
openstack sfc port pair group set [-h] [--name <name>]
                                [--description <description>]
                                [--port-pair <port-pair>]
                                [--no-port-pair]
                                <port-pair-group>
```

Table 74.66. Positional Arguments

Value	Summary
<port-pair-group>	Port pair group to modify (name or id)

Table 74.67. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the port pair group
--description <description>	Description for the port pair group
--port-pair <port-pair>	Port pair (name or id). this option can be repeated.
--no-port-pair	Remove all port pair from port pair group

74.18. SFC PORT PAIR GROUP SHOW

Display port pair group details

Usage:

```
openstack sfc port pair group show [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   <port-pair-group>
```

Table 74.68. Positional Arguments

Value	Summary
<port-pair-group>	Port pair group to display (name or id)

Table 74.69. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 74.70. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.71. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.72. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 74.73. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.19. SFC PORT PAIR GROUP UNSET

Unset port pairs from port pair group

Usage:

```
openstack sfc port pair group unset [-h]
                                   [--port-pair <port-pair> | --all-port-pair]
                                   <port-pair-group>
```

Table 74.74. Positional Arguments

Value	Summary
<port-pair-group>	Port pair group to unset (name or id)

Table 74.75. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--port-pair <port-pair>	Remove port pair(s) from the port pair group (name or ID). This option can be repeated.
--all-port-pair	Remove all port pairs from the port pair group

74.20. SFC PORT PAIR LIST

List port pairs

Usage:

```
openstack sfc port pair list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN] [--long]
```

Table 74.76. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 74.77. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.78. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 74.79. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.80. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.21. SFC PORT PAIR SET

Set port pair properties

Usage:

```
openstack sfc port pair set [-h] [--name <name>]
                          [--description <description>]
                          <port-pair>
```

Table 74.81. Positional Arguments

Value	Summary
<port-pair>	Port pair to modify (name or id)

Table 74.82. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the port pair
--description <description>	Description for the port pair

74.22. SFC PORT PAIR SHOW

Display port pair details

Usage:

```
openstack sfc port pair show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <port-pair>
```

Table 74.83. Positional Arguments

Value	Summary
<port-pair>	Port pair to display (name or id)

Table 74.84. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 74.85. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.86. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.87. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 74.88. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.23. SFC SERVICE GRAPH CREATE

Create a service graph.

Usage:

```

openstack sfc service graph create [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]
                                  [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--description DESCRIPTION]
                                  --branching-point
                                  SRC_CHAIN:DST_CHAIN_1,DST_CHAIN_2,DST_CHAIN_N
                                  <name>

```


Table 74.89. Positional Arguments

Value	Summary
<name>	Name of the service graph.

Table 74.90. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description DESCRIPTION	Description for the service graph.
--branching-point SRC_CHAIN:DST_CHAIN_1,DST_CHAIN_2,DST_CHAI N_N	Service graph branching point: the key is the source Port Chain while the value is a list of destination Port Chains. This option can be repeated.

Table 74.91. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.92. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.93. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 74.94. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

74.24. SFC SERVICE GRAPH DELETE

Delete a given service graph.

Usage:

```
openstack sfc service graph delete [-h] <service-graph>
```

Table 74.95. Positional Arguments

Value	Summary
<code><service-graph></code>	Id or name of the service graph to delete.

Table 74.96. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

74.25. SFC SERVICE GRAPH LIST

List service graphs

Usage:

```
openstack sfc service graph list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN] [--long]
```

Table 74.97. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output

Table 74.98. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 74.99. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 74.100. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.101. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

74.26. SFC SERVICE GRAPH SET

Set service graph properties

Usage:

```
openstack sfc service graph set [-h] [--name <name>]
                                [--description <description>]
                                <service-graph>
```

Table 74.102. Positional Arguments

Value	Summary
<service-graph>	Service graph to modify (name or id)

Table 74.103. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the service graph
--description <description>	Description for the service graph

74.27. SFC SERVICE GRAPH SHOW

Show information of a given service graph.

Usage:

```
openstack sfc service graph show [-h]
                                  [-f {json,shell,table,value,yaml}]
                                  [-c COLUMN] [--noindent]
                                  [--prefix PREFIX]
                                  [--max-width <integer>] [--fit-width]
                                  [--print-empty]
                                  <service-graph>
```

Table 74.104. Positional Arguments

Value	Summary
<service-graph>	Id or name of the service graph to display.

Table 74.105. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 74.106. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 74.107. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 74.108. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 74.109. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 75. SNAPSHOT

This chapter describes the commands under the **snapshot** command.

75.1. SNAPSHOT CREATE

Create new snapshot

Usage:

```
openstack snapshot create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--name <name>]
                          [--description <description>] [--force]
                          [--property <key=value>]
                          <volume>
```

Table 75.1. Positional Arguments

Value	Summary
<volume>	Volume to snapshot (name or id)

Table 75.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the snapshot
--description <description>	Description of the snapshot
--force	Create a snapshot attached to an instance. default is False
--property <key=value>	Set a property to this snapshot (repeat option to set multiple properties)

Table 75.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 75.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 75.5. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 75.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

75.2. SNAPSHOT DELETE

Delete volume snapshot(s)

Usage:

```
openstack snapshot delete [-h] <snapshot> [<snapshot> ...]
```

Table 75.7. Positional Arguments

Value	Summary
<code><snapshot></code>	Snapshot(s) to delete (name or id)

Table 75.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

75.3. SNAPSHOT LIST

List snapshots

Usage:

```
openstack snapshot list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--all-projects]
                        [--long] [--marker <snapshot>]
                        [--limit <num-snapshots>]
```

Table 75.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Include all projects (admin only)
--long	List additional fields in output
--marker <snapshot>	The last snapshot id of the previous page
--limit <num-snapshots>	Maximum number of snapshots to display

Table 75.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 75.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 75.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 75.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

75.4. SNAPSHOT SET

Set snapshot properties

Usage:

```
openstack snapshot set [-h] [--name <name>]
                        [--description <description>]
                        [--property <key=value>] [--state <state>]
                        <snapshot>
```

Table 75.14. Positional Arguments

Value	Summary
<snapshot>	Snapshot to modify (name or id)

Table 75.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New snapshot name
--description <description>	New snapshot description

Value	Summary
<code>--property <key=value></code>	Property to add/change for this snapshot (repeat option to set multiple properties)
<code>--state <state></code>	New snapshot state. ("available", "error", "creating", "deleting", or "error_deleting") (admin only) (This option simply changes the state of the snapshot in the database with no regard to actual status, exercise caution when using)

75.5. SNAPSHOT SHOW

Display snapshot details

Usage:

```
openstack snapshot show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <snapshot>
```

Table 75.16. Positional Arguments

Value	Summary
<code><snapshot></code>	Snapshot to display (name or id)

Table 75.17. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 75.18. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 75.19. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 75.20. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")--prefix PREFIX</code>	Add a prefix to all variable names

Table 75.21. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

75.6. SNAPSHOT UNSET

Unset snapshot properties

Usage:

```
openstack snapshot unset [-h] [--property <key>] <snapshot>
```

Table 75.22. Positional Arguments

Value	Summary
<code><snapshot></code>	Snapshot to modify (name or id)

Table 75.23. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--property <key></code>	Property to remove from snapshot (repeat option to remove multiple properties)

Value	Summary
-------	---------

CHAPTER 76. SOFTWARE

This chapter describes the commands under the **software** command.

76.1. SOFTWARE CONFIG CREATE

Create software config

Usage:

```
openstack software config create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                [--config-file <config-file>]
                                [--definition-file <destination-file>]
                                [--group <group>]
                                <config-name>
```

Table 76.1. Positional Arguments

Value	Summary
<config-name>	Name of the software config to create

Table 76.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--config-file <config-file>	Path to json/yaml containing map defining <inputs>, <outputs>, and <options>
--definition-file <destination-file>	Path to software config script/data
--group <group>	Group name of tool expected by the software config

Table 76.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to json
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 76.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 76.5. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 76.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

76.2. SOFTWARE CONFIG DELETE

Delete software configs

Usage:

```
openstack software config delete [-h] <config> [<config> ...]
```

Table 76.7. Positional Arguments

Value	Summary
<code><config></code>	Ids of the software configs to delete

Table 76.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

76.3. SOFTWARE CONFIG LIST

List software configs

Usage:

```
openstack software config list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--limit <limit>] [--marker <id>]
```

Table 76.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--limit <limit>	Limit the number of configs returned
--marker <id>	Return configs that appear after the given config id

Table 76.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 76.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 76.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 76.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

76.4. SOFTWARE CONFIG SHOW

Show software config details

Usage:

```

openstack software config show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--config-only]
                               <config>

```

Table 76.14. Positional Arguments

Value	Summary
<config>	Id of the config

Table 76.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--config-only	Only display the value of the <config> property.

Table 76.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 76.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 76.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 76.19. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

76.5. SOFTWARE DEPLOYMENT CREATE

Create a software deployment.

Usage:

```
openstack software deployment create [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--input-value <key=value>]
```

```

[--action <action>]
[--config <config>]
[--signal-transport <signal-transport>]
[--container <container>]
[--timeout <timeout>] --server
<server>
<deployment-name>

```

Table 76.20. Positional Arguments

Value	Summary
<deployment-name>	Name of the derived config associated with this deployment. This is used to apply a sort order to the list of configurations currently deployed to the server.

Table 76.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--input-value <key=value>	Input value to set on the deployment. this can be specified multiple times.
--action <action>	Name of an action for this deployment. this can be a custom action, or one of CREATE, UPDATE, DELETE, SUSPEND, RESUME. Default is UPDATE
--config <config>	Id of the configuration to deploy
--signal-transport <signal-transport>	How the server should signal to heat with the deployment output values. TEMP_URL_SIGNAL will create a Swift TempURL to be signaled via HTTP PUT. ZAQAR_SIGNAL will create a dedicated zaqar queue to be signaled using the provided keystone credentials.NO_SIGNAL will result in the resource going to the COMPLETE state without waiting for any signal
--container <container>	Optional name of container to store temp_url_signal objects in. If not specified a container will be created with a name derived from the DEPLOY_NAME
--timeout <timeout>	Deployment timeout in minutes
--server <server>	Id of the server being deployed to

Table 76.22. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 76.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 76.24. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 76.25. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

76.6. SOFTWARE DEPLOYMENT DELETE

Delete software deployment(s) and correlative config(s).

Usage:

```
openstack software deployment delete [-h]
                                     <deployment> [<deployment> ...]
```

Table 76.26. Positional Arguments

Value	Summary
<deployment>	Id of the deployment(s) to delete.

Table 76.27. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

76.7. SOFTWARE DEPLOYMENT LIST

List software deployments.

Usage:

```

openstack software deployment list [-h]
                                  [-f {csv,json,table,value,yaml}]
                                  [-c COLUMN]
                                  [--quote {all,minimal,none,nonnumeric}]
                                  [--noindent] [--max-width <integer>]
                                  [--fit-width] [--print-empty]
                                  [--sort-column SORT_COLUMN]
                                  [--server <server>] [--long]

```

Table 76.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--server <server>	Id of the server to fetch deployments for
--long	List more fields in output

Table 76.29. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 76.30. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 76.31. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 76.32. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

76.8. SOFTWARE DEPLOYMENT METADATA SHOW

Get deployment configuration metadata for the specified server.

Usage:

```
openstack software deployment metadata show [-h] <server>
```

Table 76.33. Positional Arguments

Value	Summary
<code><server></code>	Id of the server to fetch deployments for

Table 76.34. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

76.9. SOFTWARE DEPLOYMENT OUTPUT SHOW

Show a specific deployment output.

Usage:

```
openstack software deployment output show [-h] [--all] [--long]
    <deployment> [<output-name>]
```

Table 76.35. Positional Arguments

Value	Summary
<deployment>	Id of deployment to show the output for
<output-name>	Name of an output to display

Table 76.36. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Display all deployment outputs
--long	Show full deployment logs in output

76.10. SOFTWARE DEPLOYMENT SHOW

Show SoftwareDeployment Details.

Usage:

```
openstack software deployment show [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--long]
    <deployment>
```

Table 76.37. Positional Arguments

Value	Summary
<deployment>	Id of the deployment

Table 76.38. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	Show more fields in output

Table 76.39. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 76.40. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 76.41. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 76.42. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 77. STACK

This chapter describes the commands under the **stack** command.

77.1. STACK ABANDON

Abandon stack and output results.

Usage:

```
openstack stack abandon [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--output-file <output-file>]
                        <stack>
```

Table 77.1. Positional Arguments

Value	Summary
<stack>	Name or id of stack to abandon

Table 77.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--output-file <output-file>	File to output abandon results

Table 77.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to json
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.2. STACK ADOPT

Adopt a stack.

Usage:

```
openstack stack adopt [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [-e <environment>]
                    [--timeout <timeout>] [--enable-rollback]
                    [--parameter <key=value>] [--wait] --adopt-file
                    <adopt-file>
                    <stack-name>
```

Table 77.7. Positional Arguments

Value	Summary
<stack-name>	Name of the stack to adopt

Table 77.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-e <environment>, --environment <environment>	Path to the environment. can be specified multiple times

Value	Summary
<code>--timeout <timeout></code>	Stack creation timeout in minutes
<code>--enable-rollback</code>	Enable rollback on create/update failure
<code>--parameter <key=value></code>	Parameter values used to create the stack. can be specified multiple times
<code>--wait</code>	Wait until stack adopt completes
<code>--adopt-file <adopt-file></code>	Path to adopt stack data file

Table 77.9. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 77.10. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.11. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.12. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.3. STACK CANCEL

Cancel current task for a stack. Supported tasks for cancellation: * update * create

Usage:

```
openstack stack cancel [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--wait]
                        [--no-rollback]
                        <stack> [<stack> ...]
```

Table 77.13. Positional Arguments

Value	Summary
<stack>	Stack(s) to cancel (name or id)

Table 77.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for cancel to complete
--no-rollback	Cancel without rollback

Table 77.15. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.16. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.17. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.18. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

77.4. STACK CHECK

Check a stack.

Usage:

```

openstack stack check [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN] [--wait]
                    <stack> [<stack> ...]

```

Table 77.19. Positional Arguments

Value	Summary
<stack>	Stack(s) to check update (name or id)

Table 77.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for check to complete

Table 77.21. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.22. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 77.23. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.24. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.5. STACK CREATE

Create a stack.

Usage:

```
openstack stack create [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [-e <environment>]
                       [--timeout <timeout>] [--pre-create <resource>]
                       [--enable-rollback] [--parameter <key=value>]
                       [--parameter-file <key=file>] [--wait]
                       [--tags <tag1,tag2...>] [--dry-run] -t
                       <template>
                       <stack-name>
```

Table 77.25. Positional Arguments

Value	Summary
<stack-name>	Name of the stack to create

Table 77.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-e <environment>, --environment <environment>	Path to the environment. can be specified multiple times
--timeout <timeout>	Stack creating timeout in minutes

Value	Summary
<code>--pre-create <resource></code>	Name of a resource to set a pre-create hook to. Resources in nested stacks can be set using slash as a separator: <code>``nested_stack/another/my_resource``</code> . You can use wildcards to match multiple stacks or resources: <code>``nested_stack/an*/*_resource``</code> . This can be specified multiple times
<code>--enable-rollback</code>	Enable rollback on create/update failure
<code>--parameter <key=value></code>	Parameter values used to create the stack. this can be specified multiple times
<code>--parameter-file <key=file></code>	Parameter values from file used to create the stack. This can be specified multiple times. Parameter values would be the content of the file
<code>--wait</code>	Wait until stack goes to <code>create_complete</code> or <code>CREATE_FAILED</code>
<code>--tags <tag1,tag2...></code>	A list of tags to associate with the stack
<code>--dry-run</code>	Do not actually perform the stack create, but show what would be created
<code>-t <template>, --template <template></code>	Path to the template

Table 77.27. Output Formatters

Value	Summary
output formatter options- <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 77.28. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.29. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.30. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.6. STACK DELETE

Delete stack(s).

Usage:

```
openstack stack delete [-h] [-y] [--wait] <stack> [<stack> ...]
```

Table 77.31. Positional Arguments

Value	Summary
<stack>	Stack(s) to delete (name or id)

Table 77.32. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-y, --yes	Skip yes/no prompt (assume yes)
--wait	Wait for stack delete to complete

77.7. STACK ENVIRONMENT SHOW

Show a stack's environment.

Usage:

```

openstack stack environment show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <NAME or ID>

```

Table 77.33. Positional Arguments

Value	Summary
<NAME or ID>	Name or id of stack to query

Table 77.34. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.35. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.36. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.37. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.38. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

77.8. STACK EVENT LIST

List events.

Usage:

```

openstack stack event list [-h] [-f {csv,json,log,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--resource <resource>]
                          [--filter <key=value>] [--limit <limit>]
                          [--marker <id>] [--nested-depth <depth>]
                          [--sort <key>[:<direction>]] [--follow]
                          <stack>

```

Table 77.39. Positional Arguments

Value	Summary
<code><stack></code>	Name or id of stack to show events for

Table 77.40. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--resource <resource></code>	Name of resource to show events for. note: this cannot be specified with <code>--nested-depth</code>
<code>--filter <key=value></code>	Filter parameters to apply on returned events
<code>--limit <limit></code>	Limit the number of events returned

Value	Summary
<code>--marker <id></code>	Only return events that appear after the given id
<code>--nested-depth <depth></code>	Depth of nested stacks from which to display events. Note: this cannot be specified with <code>--resource</code>
<code>--sort <key>[:<direction>]</code>	Sort output by selected keys and directions (asc or desc) (default: asc). Specify multiple times to sort on multiple keys. Sort key can be: "event_time" (default), "resource_name", "links", "logical_resource_id", "resource_status", "resource_status_reason", "physical_resource_id", or "id". You can leave the key empty and specify ".desc" for sorting by reverse time.
<code>--follow</code>	Print events until process is halted

Table 77.41. Output Formatters

Value	Summary
output formatter options-f {csv,json,log,table,value,yaml}, --format {csv,json,log,table,value,yaml}	The output format, defaults to log
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.42. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.43. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.44. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

77.9. STACK EVENT SHOW

Show event details.

Usage:

```
openstack stack event show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <stack> <resource> <event>
```

Table 77.45. Positional Arguments

Value	Summary
<code><stack></code>	Name or id of stack to show events for
<code><resource></code>	Name of the resource event belongs to
<code><event></code>	Id of event to display details for

Table 77.46. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 77.47. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.48. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.49. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.50. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.10. STACK EXPORT

Export stack data json.

Usage:

```
openstack stack export [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--output-file <output-file>]
                        <stack>
```

Table 77.51. Positional Arguments

Value	Summary
<stack>	Name or id of stack to export

Table 77.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--output-file <output-file>	File to output export data

Table 77.53. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to json
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.54. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.55. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.56. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

77.11. STACK FAILURES LIST

Show information about failed stack resources.

Usage:

```
openstack stack failures list [-h] [--long] <stack>
```

Table 77.57. Positional Arguments

Value	Summary
<code><stack></code>	Stack to display (name or id)

Table 77.58. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	Show full deployment logs in output

77.12. STACK FILE LIST

Show a stack's files map.

Usage:

```
openstack stack file list [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty]
                        <NAME or ID>
```

Table 77.59. Positional Arguments

Value	Summary
<code><NAME or ID></code>	Name or id of stack to query

Table 77.60. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.61. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.62. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.63. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.64. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.13. STACK HOOK CLEAR

Clear resource hooks on a given stack.

Usage:

```
openstack stack hook clear [-h] [--pre-create] [--pre-update]
                          [--pre-delete]
                          <stack> <resource> [<resource> ...]
```

Table 77.65. Positional Arguments

Value	Summary
<stack>	Stack to display (name or id)
<resource>	Resource names with hooks to clear. resources in nested stacks can be set using slash as a separator: ``nested_stack/another/my_resource``. You can use wildcards to match multiple stacks or resources: ``nested_stack/an*/*_resource``

Table 77.66. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--pre-create	Clear the pre-create hooks
--pre-update	Clear the pre-update hooks
--pre-delete	Clear the pre-delete hooks

77.14. STACK HOOK POLL

List resources with pending hook for a stack.

Usage:

```
openstack stack hook poll [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--nested-depth <nested-depth>]
                          <stack>
```

Table 77.67. Positional Arguments

Value	Summary
<stack>	Stack to display (name or id)

Table 77.68. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--nested-depth <nested-depth>	Depth of nested stacks from which to display hooks

Table 77.69. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.70. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 77.71. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.72. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.15. STACK LIST

List stacks.

Usage:

```
openstack stack list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--deleted] [--nested] [--hidden]
                    [--property <key=value>] [--tags <tag1,tag2...>]
                    [--tag-mode <mode>] [--limit <limit>]
                    [--marker <id>] [--sort <key>[:<direction>]]
                    [--all-projects] [--short] [--long]
```

Table 77.73. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--deleted	Include soft-deleted stacks in the stack listing
--nested	Include nested stacks in the stack listing
--hidden	Include hidden stacks in the stack listing
--property <key=value>	Filter properties to apply on returned stacks (repeat to filter on multiple properties)
--tags <tag1,tag2...>	List of tags to filter by. can be combined with --tag-mode to specify how to filter tags
--tag-mode <mode>	Method of filtering tags. must be one of "any", "not", or "not-any". If not specified, multiple tags will be combined with the boolean AND expression
--limit <limit>	The number of stacks returned

Value	Summary
<code>--marker <id></code>	Only return stacks that appear after the given id
<code>--sort <key>[:<direction>]</code>	Sort output by selected keys and directions (asc or desc) (default: asc). Specify multiple times to sort on multiple properties
<code>--all-projects</code>	Include all projects (admin only)
<code>--short</code>	List fewer fields in output
<code>--long</code>	List additional fields in output, this is implied by <code>--all-projects</code>

Table 77.74. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.75. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.76. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.77. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

77.16. STACK OUTPUT LIST

List stack outputs.

Usage:

```
openstack stack output list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             <stack>
```

Table 77.78. Positional Arguments

Value	Summary
<code><stack></code>	Name or id of stack to query

Table 77.79. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 77.80. Output Formatters

Value	Summary
output formatter options- <code>f</code> <code>{csv,json,table,value,yaml}, --format</code> <code>{csv,json,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.81. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 77.82. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.83. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.17. STACK OUTPUT SHOW

Show stack output.

Usage:

```
openstack stack output show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--all]
                             <stack> [<output>]
```

Table 77.84. Positional Arguments

Value	Summary
<stack>	Name or id of stack to query
<output>	Name of an output to display

Table 77.85. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all	Display all stack outputs

Table 77.86. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.87. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.88. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.89. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.18. STACK RESOURCE LIST

List stack resources.

Usage:

```
openstack stack resource list [-h] [-f {csv,dot,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN] [--long]
                             [-n <nested-depth>]
                             [--filter <key=value>]
                             <stack>
```

Table 77.90. Positional Arguments

Value	Summary
<stack>	Name or id of stack to query

Table 77.91. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	Enable detailed information presented for each resource in resource list
-n <nested-depth>, --nested-depth <nested-depth>	Depth of nested stacks from which to display resources
--filter <key=value>	Filter parameters to apply on returned resources based on their name, status, type, action, id and physical_resource_id

Table 77.92. Output Formatters

Value	Summary
output formatter options-f {csv,dot,json,table,value,yaml}, --format {csv,dot,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.93. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 77.94. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.95. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.19. STACK RESOURCE MARK UNHEALTHY

Set resource's health.

Usage:

```
openstack stack resource mark unhealthy [-h] [--reset]
    <stack> <resource> [reason]
```

Table 77.96. Positional Arguments

Value	Summary
<stack>	Name or id of stack the resource belongs to
<resource>	Name of the resource
reason	Reason for state change

Table 77.97. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--reset	Set the resource as healthy

77.20. STACK RESOURCE METADATA

Show resource metadata

Usage:

```

openstack stack resource metadata [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <stack> <resource>

```

Table 77.98. Positional Arguments

Value	Summary
<stack>	Stack to display (name or id)
<resource>	Name of the resource to show the metadata for

Table 77.99. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.100. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to json
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.101. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.102. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.103. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.21. STACK RESOURCE SHOW

Display stack resource.

Usage:

```
openstack stack resource show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--with-attr <attribute>]
                             <stack> <resource>
```

Table 77.104. Positional Arguments

Value	Summary
<stack>	Name or id of stack to query
<resource>	Name of resource

Table 77.105. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--with-attr <attribute>	Attribute to show, can be specified multiple times

Table 77.106. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.107. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.108. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.109. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.22. STACK RESOURCE SIGNAL

Signal a resource with optional data.

Usage:

```
openstack stack resource signal [-h] [--data <data>]
                               [--data-file <data-file>]
                               <stack> <resource>
```

Table 77.110. Positional Arguments

Value	Summary
<stack>	Name or id of stack the resource belongs to
<resource>	Name of the resource to signal

Table 77.111. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--data <data>	Json data to send to the signal handler
--data-file <data-file>	File containing json data to send to the signal handler

77.23. STACK RESUME

Resume a stack.

Usage:

```
openstack stack resume [-h] [-f {csv,json,table,value,yaml}]
                       [-c COLUMN]
                       [--quote {all,minimal,none,nonnumeric}]
                       [--noindent] [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN] [--wait]
<stack> [<stack> ...]

```

Table 77.112. Positional Arguments

Value	Summary
<code><stack></code>	Stack(s) to resume (name or id)

Table 77.113. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--wait</code>	Wait for resume to complete

Table 77.114. Output Formatters

Value	Summary
output formatter options- <code>{csv,json,table,value,yaml}</code> , <code>--format</code> <code>{csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.115. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 77.116. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.117. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

77.24. STACK SHOW

Show stack details.

Usage:

```
openstack stack show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--no-resolve-outputs]
                    <stack>
```

Table 77.118. Positional Arguments

Value	Summary
<code><stack></code>	Stack to display (name or id)

Table 77.119. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--no-resolve-outputs</code>	Do not resolve outputs of the stack.

Table 77.120. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 77.121. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.122. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.123. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.25. STACK SNAPSHOT CREATE

Create stack snapshot.

Usage:

```
openstack stack snapshot create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--name <name>]
                               <stack>
```

Table 77.124. Positional Arguments

Value	Summary
<stack>	Name or id of stack

Table 77.125. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of snapshot

Table 77.126. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.127. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.128. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.129. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.26. STACK SNAPSHOT DELETE

Delete stack snapshot.

Usage:

```
openstack stack snapshot delete [-h] [-y] <stack> <snapshot>
```

Table 77.130. Positional Arguments

Value	Summary
<stack>	Name or id of stack
<snapshot>	Id of stack snapshot

Table 77.131. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-y, --yes	Skip yes/no prompt (assume yes)

77.27. STACK SNAPSHOT LIST

List stack snapshots.

Usage:

```
openstack stack snapshot list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               <stack>
```

Table 77.132. Positional Arguments

Value	Summary
<stack>	Name or id of stack containing the snapshots

Table 77.133. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.134. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.135. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 77.136. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.137. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.28. STACK SNAPSHOT RESTORE

Restore stack snapshot

Usage:

```
openstack stack snapshot restore [-h] <stack> <snapshot>
```

Table 77.138. Positional Arguments

Value	Summary
<stack>	Name or id of stack containing the snapshot
<snapshot>	Id of the snapshot to restore

Table 77.139. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

77.29. STACK SNAPSHOT SHOW

Show stack snapshot.

Usage:

```

openstack stack snapshot show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               <stack> <snapshot>

```

Table 77.140. Positional Arguments

Value	Summary
<stack>	Name or id of stack containing the snapshot
<snapshot>	Id of the snapshot to show

Table 77.141. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.142. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
-------	---------

Table 77.143. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 77.144. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 77.145. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

77.30. STACK SUSPEND

Suspend a stack.

Usage:

```
openstack stack suspend [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--wait]
                        <stack> [<stack> ...]
```

Table 77.146. Positional Arguments

Value	Summary
<stack>	Stack(s) to suspend (name or id)

Table 77.147. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--wait	Wait for suspend to complete

Table 77.148. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 77.149. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 77.150. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.151. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.31. STACK TEMPLATE SHOW

Display stack template.

Usage:

```
openstack stack template show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             <stack>
```

Table 77.152. Positional Arguments

Value	Summary
<stack>	Name or id of stack to query

Table 77.153. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 77.154. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to yaml
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.155. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.156. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.157. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

77.32. STACK UPDATE

Update a stack.

Usage:

```
openstack stack update [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [-t <template>]
                        [-e <environment>] [--pre-update <resource>]
                        [--timeout <timeout>] [--rollback <value>]
                        [--dry-run] [--show-nested]
                        [--parameter <key=value>]
                        [--parameter-file <key=file>] [--existing]
                        [--clear-parameter <parameter>]
                        [--tags <tag1,tag2...>] [--wait] [--converge]
                        <stack>
```

Table 77.158. Positional Arguments

Value	Summary
<stack>	Name or id of stack to update

Table 77.159. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-t <template>, --template <template>	Path to the template
-e <environment>, --environment <environment>	Path to the environment. can be specified multiple times
--pre-update <resource>	Name of a resource to set a pre-update hook to. Resources in nested stacks can be set using slash as a separator: ``nested_stack/another/my_resource``. You can use wildcards to match multiple stacks or resources: ``nested_stack/an*/*_resource``. This can be specified multiple times
--timeout <timeout>	Stack update timeout in minutes
--rollback <value>	Set rollback on update failure. value "enabled" sets rollback to enabled. Value "disabled" sets rollback to disabled. Value "keep" uses the value of existing stack to be updated (default)
--dry-run	Do not actually perform the stack update, but show what would be changed
--show-nested	Show nested stacks when performing --dry-run
--parameter <key=value>	Parameter values used to create the stack. this can be specified multiple times
--parameter-file <key=file>	Parameter values from file used to create the stack. This can be specified multiple times. Parameter value would be the content of the file

Value	Summary
--existing	Re-use the template, parameters and environment of the current stack. If the template argument is omitted then the existing template is used. If no --environment is specified then the existing environment is used. Parameters specified in --parameter will patch over the existing values in the current stack. Parameters omitted will keep the existing values
--clear-parameter <parameter>	Remove the parameters from the set of parameters of current stack for the stack-update. The default value in the template will be used. This can be specified multiple times
--tags <tag1,tag2...>	An updated list of tags to associate with the stack
--wait	Wait until stack goes to update_complete or UPDATE_FAILED
--converge	Stack update with observe on reality.

Table 77.160. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 77.161. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 77.162. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 77.163. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 78. SUBNET

This chapter describes the commands under the **subnet** command.

78.1. SUBNET CREATE

Create a subnet

Usage:

```
openstack subnet create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--project <project>]
                        [--project-domain <project-domain>]
                        [--subnet-pool <subnet-pool> | --use-prefix-delegation
                        USE_PREFIX_DELEGATION | --use-default-subnet-pool]
                        [--prefix-length <prefix-length>]
                        [--subnet-range <subnet-range>]
                        [--dhcp | --no-dhcp] [--gateway <gateway>]
                        [--ip-version {4,6}]
                        [--ipv6-ra-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}]
                        [--ipv6-address-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}]
                        [--network-segment <network-segment>] --network
                        <network> [--description <description>]
                        [--allocation-pool start=<ip-address>,end=<ip-address>]
                        [--dns-nameserver <dns-nameserver>]
                        [--host-route destination=<subnet>,gateway=<ip-address>]
                        [--service-type <service-type>]
                        [--tag <tag> | --no-tag]
                        <name>
```

Table 78.1. Positional Arguments

Value	Summary
<name>	New subnet name

Table 78.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Value	Summary
--subnet-pool <subnet-pool>	Subnet pool from which this subnet will obtain a cidr (Name or ID)
--use-prefix-delegation USE_PREFIX_DELEGATION	Use <i>prefix-delegation</i> if ip is ipv6 format and ip would be delegated externally
--use-default-subnet-pool	Use default subnet pool for --ip-version
--prefix-length <prefix-length>	Prefix length for subnet allocation from subnet pool
--subnet-range <subnet-range>	Subnet range in cidr notation (required if --subnet-pool is not specified, optional otherwise)
--dhcp	Enable dhcp (default)
--no-dhcp	Disable dhcp
--gateway <gateway>	Specify a gateway for the subnet. the three options are: <ip-address>: Specific IP address to use as the gateway, <i>auto</i> : Gateway address should automatically be chosen from within the subnet itself, <i>none</i> : This subnet will not use a gateway, e.g.: --gateway 192.168.9.1, --gateway auto, --gateway none (default is <i>auto</i>).
--ip-version {4,6}	Ip version (default is 4). note that when subnet pool is specified, IP version is determined from the subnet pool and this option is ignored.
--ipv6-ra-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}	Ipv6 ra (router advertisement) mode, valid modes: [dhcpv6-stateful, dhcpv6-stateless, slaac]
--ipv6-address-mode {dhcpv6-stateful,dhcpv6-stateless,slaac}	Ipv6 address mode, valid modes: [dhcpv6-stateful, dhcpv6-stateless, slaac]
--network-segment <network-segment>	Network segment to associate with this subnet (name or ID)
--network <network>	Network this subnet belongs to (name or id)
--description <description>	Set subnet description
--allocation-pool start=<ip-address>,end=<ip-address>	Allocation pool ip addresses for this subnet e.g.: start=192.168.199.2,end=192.168.199.254 (repeat option to add multiple IP addresses)

Value	Summary
<code>--dns-nameserver <dns-nameserver></code>	Dns server for this subnet (repeat option to set multiple DNS servers)
<code>--host-route destination=<subnet>,gateway=<ip-address></code>	Additional route for this subnet e.g.: destination=10.10.0.0/16,gateway=192.168.71.254 destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to add multiple routes)
<code>--service-type <service-type></code>	Service type for this subnet e.g.: network:floatingip_agent_gateway. Must be a valid device owner value for a network port (repeat option to set multiple service types)
<code>--tag <tag></code>	Tag to be added to the subnet (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the subnet

Table 78.3. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 78.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 78.5. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 78.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

78.2. SUBNET DELETE

Delete subnet(s)

Usage:

```
openstack subnet delete [-h] <subnet> [<subnet> ...]
```

Table 78.7. Positional Arguments

Value	Summary
<code><subnet></code>	Subnet(s) to delete (name or id)

Table 78.8. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

78.3. SUBNET LIST

List subnets

Usage:

```
openstack subnet list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--long]
                        [--ip-version <ip-version>] [--dhcp | --no-dhcp]
                        [--service-type <service-type>]
                        [--project <project>]
                        [--project-domain <project-domain>]
                        [--network <network>] [--gateway <gateway>]
                        [--name <name>] [--subnet-range <subnet-range>]
```

```

[--tags <tag>[,<tag>,...]]
[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]

```

Table 78.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--ip-version <ip-version>	List only subnets of given ip version in output. Allowed values for IP version are 4 and 6.
--dhcp	List subnets which have dhcp enabled
--no-dhcp	List subnets which have dhcp disabled
--service-type <service-type>	List only subnets of a given service type in output e.g.: network:floatingip_agent_gateway. Must be a valid device owner value for a network port (repeat option to list multiple service types)
--project <project>	List only subnets which belong to a given project in output (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--network <network>	List only subnets which belong to a given network in output (name or ID)
--gateway <gateway>	List only subnets of given gateway ip in output
--name <name>	List only subnets of given name in output
--subnet-range <subnet-range>	List only subnets of given subnet range (in cidr notation) in output e.g.: --subnet-range 10.10.0.0/16
--tags <tag>[,<tag>,...]	List subnets which have all given tag(s) (comma-separated list of tags)
--any-tags <tag>[,<tag>,...]	List subnets which have any given tag(s) (comma-separated list of tags)
--not-tags <tag>[,<tag>,...]	Exclude subnets which have all given tag(s) (comma-separated list of tags)

Value	Summary
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude subnets which have any given tag(s) (comma-separated list of tags)

Table 78.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 78.11. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 78.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 78.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

78.4. SUBNET POOL CREATE

Create subnet pool

Usage:

```
openstack subnet pool create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] --pool-prefix
                             <pool-prefix>
                             [--default-prefix-length <default-prefix-length>]
                             [--min-prefix-length <min-prefix-length>]
                             [--max-prefix-length <max-prefix-length>]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             [--address-scope <address-scope>]
                             [--default | --no-default]
                             [--share | --no-share]
                             [--description <description>]
                             [--default-quota <num-ip-addresses>]
                             [--tag <tag> | --no-tag]
                             <name>
```

Table 78.14. Positional Arguments

Value	Summary
<name>	Name of the new subnet pool

Table 78.15. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--pool-prefix <pool-prefix>	Set subnet pool prefixes (in cidr notation) (repeat option to set multiple prefixes)
--default-prefix-length <default-prefix-length>	Set subnet pool default prefix length
--min-prefix-length <min-prefix-length>	Set subnet pool minimum prefix length
--max-prefix-length <max-prefix-length>	Set subnet pool maximum prefix length
--project <project>	Owner's project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Value	Summary
<code>--address-scope <address-scope></code>	Set address scope associated with the subnet pool (name or ID), prefixes must be unique across address scopes
<code>--default</code>	Set this as a default subnet pool
<code>--no-default</code>	Set this as a non-default subnet pool
<code>--share</code>	Set this subnet pool as shared
<code>--no-share</code>	Set this subnet pool as not shared
<code>--description <description></code>	Set subnet pool description
<code>--default-quota <num-ip-addresses></code>	Set default per-project quota for this subnet pool as the number of IP addresses that can be allocated from the subnet pool
<code>--tag <tag></code>	Tag to be added to the subnet pool (repeat option to set multiple tags)
<code>--no-tag</code>	No tags associated with the subnet pool

Table 78.16. Output Formatters

Value	Summary
output formatter options-f <code>{json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 78.17. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 78.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 78.19. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

78.5. SUBNET POOL DELETE

Delete subnet pool(s)

Usage:

```
openstack subnet pool delete [-h] <subnet-pool> [<subnet-pool> ...]
```

Table 78.20. Positional Arguments

Value	Summary
<subnet-pool>	Subnet pool(s) to delete (name or id)

Table 78.21. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

78.6. SUBNET POOL LIST

List subnet pools

Usage:

```
openstack subnet pool list [-h] [-f {csv,json,table,value,yaml}]  
[-c COLUMN]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN] [--long]
[--share | --no-share]
[--default | --no-default]
[--project <project>]
[--project-domain <project-domain>]
[--name <name>]
[--address-scope <address-scope>]
[--tags <tag>[,<tag>,...]]
[--any-tags <tag>[,<tag>,...]]
[--not-tags <tag>[,<tag>,...]]
[--not-any-tags <tag>[,<tag>,...]]

```

Table 78.22. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--share	List subnet pools shared between projects
--no-share	List subnet pools not shared between projects
--default	List subnet pools used as the default external subnet pool
--no-default	List subnet pools not used as the default external subnet pool
--project <project>	List subnet pools according to their project (name or ID)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--name <name>	List only subnet pools of given name in output
--address-scope <address-scope>	List only subnet pools of given address scope in output (name or ID)
--tags <tag>[,<tag>,...]	List subnet pools which have all given tag(s) (comma- separated list of tags)

Value	Summary
<code>--any-tags <tag>[,<tag>,...]</code>	List subnet pools which have any given tag(s) (comma-separated list of tags)
<code>--not-tags <tag>[,<tag>,...]</code>	Exclude subnet pools which have all given tag(s) (Comma-separated list of tags)
<code>--not-any-tags <tag>[,<tag>,...]</code>	Exclude subnet pools which have any given tag(s) (Comma-separated list of tags)

Table 78.23. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 78.24. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 78.25. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 78.26. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

78.7. SUBNET POOL SET

Set subnet pool properties

Usage:

```

openstack subnet pool set [-h] [--name <name>]
                        [--pool-prefix <pool-prefix>]
                        [--default-prefix-length <default-prefix-length>]
                        [--min-prefix-length <min-prefix-length>]
                        [--max-prefix-length <max-prefix-length>]
                        [--address-scope <address-scope> | --no-address-scope]
                        [--default | --no-default]
                        [--description <description>]
                        [--default-quota <num-ip-addresses>]
                        [--tag <tag>] [--no-tag]
                        <subnet-pool>

```

Table 78.27. Positional Arguments

Value	Summary
<subnet-pool>	Subnet pool to modify (name or id)

Table 78.28. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set subnet pool name
--pool-prefix <pool-prefix>	Set subnet pool prefixes (in cidr notation) (repeat option to set multiple prefixes)
--default-prefix-length <default-prefix-length>	Set subnet pool default prefix length
--min-prefix-length <min-prefix-length>	Set subnet pool minimum prefix length

Value	Summary
<code>--max-prefix-length <max-prefix-length></code>	Set subnet pool maximum prefix length
<code>--address-scope <address-scope></code>	Set address scope associated with the subnet pool (name or ID), prefixes must be unique across address scopes
<code>--no-address-scope</code>	Remove address scope associated with the subnet pool
<code>--default</code>	Set this as a default subnet pool
<code>--no-default</code>	Set this as a non-default subnet pool
<code>--description <description></code>	Set subnet pool description
<code>--default-quota <num-ip-addresses></code>	Set default per-project quota for this subnet pool as the number of IP addresses that can be allocated from the subnet pool
<code>--tag <tag></code>	Tag to be added to the subnet pool (repeat option to set multiple tags)
<code>--no-tag</code>	Clear tags associated with the subnet pool. specify both <code>--tag</code> and <code>--no-tag</code> to overwrite current tags

78.8. SUBNET POOL SHOW

Display subnet pool details

Usage:

```
openstack subnet pool show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <subnet-pool>
```

Table 78.29. Positional Arguments

Value	Summary
<code><subnet-pool></code>	Subnet pool to display (name or id)

Table 78.30. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 78.31. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 78.32. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 78.33. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 78.34. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

78.9. SUBNET POOL UNSET

Unset subnet pool properties

Usage:

■

```
openstack subnet pool unset [-h] [--tag <tag> | --all-tag]
                             <subnet-pool>
```

Table 78.35. Positional Arguments

Value	Summary
<subnet-pool>	Subnet pool to modify (name or id)

Table 78.36. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--tag <tag>	Tag to be removed from the subnet pool (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the subnet pool

78.10. SUBNET SET

Set subnet properties

Usage:

```
openstack subnet set [-h] [--name <name>] [--dhcp | --no-dhcp]
                    [--gateway <gateway>]
                    [--network-segment <network-segment>]
                    [--description <description>] [--tag <tag>]
                    [--no-tag]
                    [--allocation-pool start=<ip-address>,end=<ip-address>]
                    [--no-allocation-pool]
                    [--dns-nameserver <dns-nameserver>]
                    [--no-dns-nameservers]
                    [--host-route destination=<subnet>,gateway=<ip-address>]
                    [--no-host-route] [--service-type <service-type>]
                    <subnet>
```

Table 78.37. Positional Arguments

Value	Summary
<subnet>	Subnet to modify (name or id)

Table 78.38. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Updated name of the subnet
--dhcp	Enable dhcp
--no-dhcp	Disable dhcp
--gateway <gateway>	Specify a gateway for the subnet. the options are: <ip-address>: Specific IP address to use as the gateway, <i>none</i> : This subnet will not use a gateway, e.g.: --gateway 192.168.9.1, --gateway none.
--network-segment <network-segment>	Network segment to associate with this subnet (name or ID). It is only allowed to set the segment if the current value is None , the network must also have only one segment and only one subnet can exist on the network.
--description <description>	Set subnet description
--tag <tag>	Tag to be added to the subnet (repeat option to set multiple tags)
--no-tag	Clear tags associated with the subnet. specify both -tag and --no-tag to overwrite current tags
--allocation-pool start=<ip-address>,end=<ip-address>	Allocation pool ip addresses for this subnet e.g.: start=192.168.199.2,end=192.168.199.254 (repeat option to add multiple IP addresses)
--no-allocation-pool	Clear associated allocation-pools from the subnet. Specify both --allocation-pool and --no-allocation-pool to overwrite the current allocation pool information.
--dns-nameserver <dns-nameserver>	Dns server for this subnet (repeat option to set multiple DNS servers)
--no-dns-nameservers	Clear existing information of dns nameservers. specify both --dns-nameserver and --no-dns-nameserver to overwrite the current DNS Nameserver information.

Value	Summary
<code>--host-route destination=<subnet>,gateway=<ip-address></code>	Additional route for this subnet e.g.: destination=10.10.0.0/16,gateway=192.168.71.254 destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to add multiple routes)
<code>--no-host-route</code>	Clear associated host-routes from the subnet. specify both <code>--host-route</code> and <code>--no-host-route</code> to overwrite the current host route information.
<code>--service-type <service-type></code>	Service type for this subnet e.g.: network:floatingip_agent_gateway. Must be a valid device owner value for a network port (repeat option to set multiple service types)

78.11. SUBNET SHOW

Display subnet details

Usage:

```
openstack subnet show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <subnet>
```

Table 78.39. Positional Arguments

Value	Summary
<code><subnet></code>	Subnet to display (name or id)

Table 78.40. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 78.41. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 78.42. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 78.43. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 78.44. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

78.12. SUBNET UNSET

Unset subnet properties

Usage:

```
openstack subnet unset [-h]
                        [--allocation-pool start=<ip-address>,end=<ip-address>]
                        [--dns-nameserver <dns-nameserver>]
                        [--host-route destination=<subnet>,gateway=<ip-address>]
```

```

[--service-type <service-type>]
[--tag <tag> | --all-tag]
<subnet>

```

Table 78.45. Positional Arguments

Value	Summary
<subnet>	Subnet to modify (name or id)

Table 78.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--allocation-pool start=<ip-address>,end=<ip-address>	Allocation pool ip addresses to be removed from this subnet e.g.: start=192.168.199.2,end=192.168.199.254 (repeat option to unset multiple allocation pools)
--dns-nameserver <dns-nameserver>	Dns server to be removed from this subnet (repeat option to unset multiple DNS servers)
--host-route destination=<subnet>,gateway=<ip-address>	Route to be removed from this subnet e.g.: destination=10.10.0.0/16,gateway=192.168.71.254 destination: destination subnet (in CIDR notation) gateway: nexthop IP address (repeat option to unset multiple host routes)
--service-type <service-type>	Service type to be removed from this subnet e.g.: network:floatingip_agent_gateway. Must be a valid device owner value for a network port (repeat option to unset multiple service types)
--tag <tag>	Tag to be removed from the subnet (repeat option to remove multiple tags)
--all-tag	Clear all tags associated with the subnet

CHAPTER 79. TASK

This chapter describes the commands under the **task** command.

79.1. TASK EXECUTION LIST

List all tasks.

Usage:

```
openstack task execution list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--marker [MARKER]] [--limit [LIMIT]]
                             [--sort_keys [SORT_KEYS]]
                             [--sort_dirs [SORT_DIRS]]
                             [--filter FILTERS] [--oldest]
                             [workflow_execution]
```

Table 79.1. Positional Arguments

Value	Summary
workflow_execution	Workflow execution id associated with list of tasks.

Table 79.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Value	Summary
<code>--oldest</code>	Display the executions starting from the oldest entries instead of the newest

Table 79.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 79.4. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 79.5. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 79.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

79.2. TASK EXECUTION PUBLISHED SHOW

Show task published variables.

Usage:

```
openstack task execution published show [-h] id
```

Table 79.7. Positional Arguments

Value	Summary
id	Task id

Table 79.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

79.3. TASK EXECUTION RERUN

Rerun an existing task.

Usage:

```
openstack task execution rerun [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--resume] [-e ENV]
                               id
```

Table 79.9. Positional Arguments

Value	Summary
id	Task identifier

Table 79.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--resume	Rerun only failed or unstarted action executions for with-items task

Value	Summary
-e ENV, --env ENV	Environment variables

Table 79.11. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 79.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 79.13. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 79.14. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

79.4. TASK EXECUTION RESULT SHOW

Show task output data.

Usage:

■

```
openstack task execution result show [-h] id
```

Table 79.15. Positional Arguments

Value	Summary
id	Task id

Table 79.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

79.5. TASK EXECUTION SHOW

Show specific task.

Usage:

```
openstack task execution show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               task
```

Table 79.17. Positional Arguments

Value	Summary
task	Task identifier

Table 79.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 79.19. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 79.20. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 79.21. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 79.22. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 80. TLD

This chapter describes the commands under the **tld** command.

80.1. TLD CREATE

Create new tld

Usage:

```
openstack tld create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] --name NAME
                    [--description DESCRIPTION] [--all-projects]
                    [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
```

Table 80.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tld name
--description DESCRIPTION	Description
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 80.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 80.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 80.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 80.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

80.2. TLD DELETE

Delete tld

Usage:

```
openstack tld delete [-h] [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```

Table 80.6. Positional Arguments

Value	Summary
id	Tld id

Table 80.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

80.3. TLD LIST

List tlds

Usage:

```

openstack tld list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                  [--quote {all,minimal,none,nonnumeric}] [--noindent]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--sort-column SORT_COLUMN]
                  [--name NAME] [--description DESCRIPTION]
                  [--all-projects] [--edit-managed]
                  [--sudo-project-id SUDO_PROJECT_ID]

```

Table 80.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tld name
--description DESCRIPTION	Tld description
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 80.9. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table

Value	Summary
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 80.10. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 80.11. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 80.12. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

80.4. TLD SET

Set tld properties

Usage:

```
openstack tld set [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                  [--noindent] [--prefix PREFIX]
                  [--max-width <integer>] [--fit-width] [--print-empty]
                  [--name NAME]
                  [--description DESCRIPTION | --no-description]
                  [--all-projects] [--edit-managed]
                  [--sudo-project-id SUDO_PROJECT_ID]
                  id
```


Table 80.13. Positional Arguments

Value	Summary
id	Tld id

Table 80.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tld name
--description DESCRIPTION	Description
--no-description--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 80.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 80.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 80.17. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 80.18. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

80.5. TLD SHOW

Show tld details

Usage:

```
openstack tld show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                  [--noindent] [--prefix PREFIX]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--all-projects] [--edit-managed]
                  [--sudo-project-id SUDO_PROJECT_ID]
                  id
```

Table 80.19. Positional Arguments

Value	Summary
<code>id</code>	Tld id

Table 80.20. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 80.21. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 80.22. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 80.23. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 80.24. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 81. TOKEN

This chapter describes the commands under the **token** command.

81.1. TOKEN ISSUE

Issue new token

Usage:

```
openstack token issue [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
```

Table 81.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 81.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 81.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 81.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 81.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

81.2. TOKEN REVOKE

Revoke existing token

Usage:

```
openstack token revoke [-h] <token>
```

Table 81.6. Positional Arguments

Value	Summary
<code><token></code>	Token to be deleted

Table 81.7. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

CHAPTER 82. TRIPLEO

This chapter describes the commands under the **tripleo** command.

82.1. TRIPLEO CONFIG GENERATE ANSIBLE

Generate the default ansible.cfg for UC/AIO-standalone deployments.

Usage:

```
openstack tripleo config generate ansible
                                [--deployment-user DEPLOYMENT_USER]
                                [--output-dir OUTPUT_DIR]
```

Table 82.1. Optional Arguments

Value	Summary
--deployment-user DEPLOYMENT_USER	User who executes the tripleo config generate command. Defaults to stack.
--output-dir OUTPUT_DIR	Directory to output ansible.cfg and ansible.log files.

82.2. TRIPLEO CONTAINER IMAGE PREPARE DEFAULT

Generate a default ContainerImagePrepare parameter.

Usage:

```
openstack tripleo container image prepare default [-h]
                                                  [--output-env-file <file path>]
                                                  [--local-push-destination]
```

Table 82.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--output-env-file <file path>	File to write environment file containing default ContainerImagePrepare value.
--local-push-destination	Include a push_destination to trigger upload to a local registry.

82.3. TRIPLEO CONTAINER IMAGE PREPARE

Prepare and upload containers from a single command.

Usage:

```

openstack tripleo container image prepare [-h]
                                         [--environment-file <file path>]
                                         [--environment-directory <HEAT ENVIRONMENT DIRECTORY>]
                                         [--roles-file ROLES_FILE]
                                         [--output-env-file <file path>]
                                         [--dry-run]
                                         [--cleanup <full, partial, none>]

```

Table 82.3. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--environment-file <file path>, -e <file path>	Environment file containing the containerimageprepare parameter which specifies all prepare actions. Also, environment files specifying which services are containerized. Entries will be filtered to only contain images used by containerized services. (Can be specified more than once.)
--environment-directory <HEAT ENVIRONMENT DIRECTORY>	Environment file directories that are automatically added to the environment. Can be specified more than once. Files in directories are loaded in ascending sort order.
--roles-file ROLES_FILE, -r ROLES_FILE	Roles file, overrides the default roles_data.yaml in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
--output-env-file <file path>	File to write heat environment file which specifies all image parameters. Any existing file will be overwritten.
--dry-run	Do not perform any pull, modify, or push operations. The environment file will still be populated as if these operations were performed.
--cleanup <full, partial, none>	Cleanup behavior for local images left after upload. The default <i>full</i> will attempt to delete all local images. <i>partial</i> will leave images required for deployment on this host. <i>none</i> will do no cleanup.

82.4. TRIPLEO DEPLOY

Deploy containerized Undercloud

Usage:

-

```

openstack tripleo deploy [--templates [TEMPLATES]] [--standalone]
    [--upgrade] [-y] [--stack STACK]
    [--output-dir OUTPUT_DIR] [--output-only]
    [--standalone-role STANDALONE_ROLE]
    [-t <TIMEOUT>] [-e <HEAT ENVIRONMENT FILE>]
    [--roles-file ROLES_FILE]
    [--networks-file NETWORKS_FILE]
    [--plan-environment-file PLAN_ENVIRONMENT_FILE]
    [--heat-api-port <HEAT_API_PORT>]
    [--heat-user <HEAT_USER>]
    [--deployment-user DEPLOYMENT_USER]
    [--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER]
    [--heat-container-image <HEAT_CONTAINER_IMAGE>]
    [--heat-native [HEAT_NATIVE]]
    [--local-ip <LOCAL_IP>]
    [--control-virtual-ip <CONTROL_VIRTUAL_IP>]
    [--public-virtual-ip <PUBLIC_VIRTUAL_IP>]
    [--local-domain <LOCAL_DOMAIN>] [--cleanup]
    [--hieradata-override [HIERADATA_OVERRIDE]]
    [--keep-running] [--inflight-validations]
    [--force-stack-update | --force-stack-create]

```

Table 82.4. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--standalone	Run deployment as a standalone deployment with no undercloud.
--upgrade	Upgrade an existing deployment.
-y, --yes	Skip yes/no prompt (assume yes).
--stack STACK	Name for the ephemeral (one-time create and forget) heat stack.
--output-dir OUTPUT_DIR	Directory to output state, processed heat templates, ansible deployment files.
--output-only	Do not execute the ansible playbooks. by default the playbooks are saved to the output-dir and then executed.
--standalone-role STANDALONE_ROLE	The role to use for standalone configuration when populating the deployment actions.
-t <TIMEOUT>, --timeout <TIMEOUT>	Deployment timeout in minutes.

Value	Summary
<code>-e <HEAT ENVIRONMENT FILE>, --environment-file <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default roles_data_undercloud.yaml in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Roles file, overrides the default /dev/null in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default plan-environment.yaml in the --templates directory
<code>--heat-api-port <HEAT_API_PORT></code>	Heat api port to use for the installers private heat API instance. Optional. Default: 8006.)
<code>--heat-user <HEAT_USER></code>	User to execute the non-privileged heat-all process. Defaults to heat.
<code>--deployment-user DEPLOYMENT_USER</code>	User who executes the tripleo deploy command. defaults to \$SUDO_USER. If \$SUDO_USER is unset it defaults to stack.
<code>--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. If not specified the python version of the openstackclient will be used. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
<code>--heat-container-image <HEAT_CONTAINER_IMAGE></code>	The container image to use when launching the heat-all process. Defaults to: tripleomaster/centos-binary-heat-all:current-tripleo
<code>--heat-native [HEAT_NATIVE]</code>	Execute the heat-all process natively on this host. This option requires that the heat-all binaries be installed locally on this machine. This option is enabled by default which means heat-all is executed on the host OS directly.
<code>--local-ip <LOCAL_IP></code>	Local ip/cidr for undercloud traffic. required.

Value	Summary
<code>--control-virtual-ip <CONTROL_VIRTUAL_IP></code>	Control plane vip. this allows the undercloud installer to configure a custom VIP on the control plane.
<code>--public-virtual-ip <PUBLIC_VIRTUAL_IP></code>	Public nw vip. this allows the undercloud installer to configure a custom VIP on the public (external) NW.
<code>--local-domain <LOCAL_DOMAIN></code>	Local domain for standalone cloud and its api endpoints
<code>--cleanup</code>	Cleanup temporary files. using this flag will remove the temporary files used during deployment in after the command is run.
<code>--hieradata-override [HIERADATA_OVERRIDE]</code>	Path to hieradata override file. when it points to a heat env file, it is passed in t-h-t via <code>--environment-file</code> . When the file contains legacy instack data, it is wrapped with <code><role>ExtraConfig</code> and also passed in for t-h-t as a temp file created in <code>--output-dir</code> . Note, instack hiera data may be not t-h-t compatible and will highly likely require a manual revision.
<code>--keep-running</code>	Keep the ephemeral heat running after the stack operation is complete. This is for debugging purposes only. The ephemeral Heat can be used by <code>openstackclient</code> with: <code>OS_AUTH_TYPE=none</code> <code>OS_ENDPOINT=http://127.0.0.1:8006/v1/admin</code> <code>openstack stack list</code> where 8006 is the port specified by <code>--heat-api-port</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--force-stack-update</code>	Do a virtual update of the ephemeral heat stack (it cannot take real updates). New or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=UPDATE</code> .
<code>--force-stack-create</code>	Do a virtual create of the ephemeral heat stack. new or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=CREATE</code> .

82.5. TRIPLEO UPGRADE

Upgrade TripleO

Usage:

```

openstack tripleo upgrade [--templates [TEMPLATES]] [--standalone]
                          [--upgrade] [-y] [--stack STACK]
                          [--output-dir OUTPUT_DIR] [--output-only]
                          [--standalone-role STANDALONE_ROLE]
                          [-t <TIMEOUT>] [-e <HEAT ENVIRONMENT FILE>]
                          [--roles-file ROLES_FILE]
                          [--networks-file NETWORKS_FILE]
                          [--plan-environment-file PLAN_ENVIRONMENT_FILE]
                          [--heat-api-port <HEAT_API_PORT>]
                          [--heat-user <HEAT_USER>]
                          [--deployment-user DEPLOYMENT_USER]
                          [--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER]
                          [--heat-container-image <HEAT_CONTAINER_IMAGE>]
                          [--heat-native [HEAT_NATIVE]]
                          [--local-ip <LOCAL_IP>]
                          [--control-virtual-ip <CONTROL_VIRTUAL_IP>]
                          [--public-virtual-ip <PUBLIC_VIRTUAL_IP>]
                          [--local-domain <LOCAL_DOMAIN>] [--cleanup]
                          [--hieradata-override [HIERADATA_OVERRIDE]]
                          [--keep-running] [--inflight-validations]
                          [--force-stack-update | --force-stack-create]

```

Table 82.5. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--standalone	Run deployment as a standalone deployment with no undercloud.
--upgrade	Upgrade an existing deployment.
-y, --yes	Skip yes/no prompt (assume yes).
--stack STACK	Name for the ephemeral (one-time create and forget) heat stack.
--output-dir OUTPUT_DIR	Directory to output state, processed heat templates, ansible deployment files.
--output-only	Do not execute the ansible playbooks. by default the playbooks are saved to the output-dir and then executed.
--standalone-role STANDALONE_ROLE	The role to use for standalone configuration when populating the deployment actions.

Value	Summary
<code>-t <TIMEOUT>, --timeout <TIMEOUT></code>	Deployment timeout in minutes.
<code>-e <HEAT ENVIRONMENT FILE>, --environment-file <HEAT ENVIRONMENT FILE></code>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
<code>--roles-file ROLES_FILE, -r ROLES_FILE</code>	Roles file, overrides the default roles_data_undercloud.yaml in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--networks-file NETWORKS_FILE, -n NETWORKS_FILE</code>	Roles file, overrides the default /dev/null in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
<code>--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE</code>	Plan environment file, overrides the default plan-environment.yaml in the --templates directory
<code>--heat-api-port <HEAT_API_PORT></code>	Heat api port to use for the installers private heat API instance. Optional. Default: 8006.)
<code>--heat-user <HEAT_USER></code>	User to execute the non-privileged heat-all process. Defaults to heat.
<code>--deployment-user DEPLOYMENT_USER</code>	User who executes the tripleo deploy command. defaults to \$SUDO_USER. If \$SUDO_USER is unset it defaults to stack.
<code>--deployment-python-interpretor DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. If not specified the python version of the openstackclient will be used. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
<code>--heat-container-image <HEAT_CONTAINER_IMAGE></code>	The container image to use when launching the heat-all process. Defaults to: tripleomaster/centos-binary-heat-all:current-tripleo
<code>--heat-native [HEAT_NATIVE]</code>	Execute the heat-all process natively on this host. This option requires that the heat-all binaries be installed locally on this machine. This option is enabled by default which means heat-all is executed on the host OS directly.
<code>--local-ip <LOCAL_IP></code>	Local ip/cidr for undercloud traffic. required.

Value	Summary
<code>--control-virtual-ip <CONTROL_VIRTUAL_IP></code>	Control plane vip. this allows the undercloud installer to configure a custom VIP on the control plane.
<code>--public-virtual-ip <PUBLIC_VIRTUAL_IP></code>	Public nw vip. this allows the undercloud installer to configure a custom VIP on the public (external) NW.
<code>--local-domain <LOCAL_DOMAIN></code>	Local domain for standalone cloud and its api endpoints
<code>--cleanup</code>	Cleanup temporary files. using this flag will remove the temporary files used during deployment in after the command is run.
<code>--hieradata-override [HIERADATA_OVERRIDE]</code>	Path to hieradata override file. when it points to a heat env file, it is passed in t-h-t via <code>--environment-file</code> . When the file contains legacy instack data, it is wrapped with <code><role>ExtraConfig</code> and also passed in for t-h-t as a temp file created in <code>--output-dir</code> . Note, instack hiera data may be not t-h-t compatible and will highly likely require a manual revision.
<code>--keep-running</code>	Keep the ephemeral heat running after the stack operation is complete. This is for debugging purposes only. The ephemeral Heat can be used by <code>openstackclient</code> with: <code>OS_AUTH_TYPE=none</code> <code>OS_ENDPOINT=http://127.0.0.1:8006/v1/admin</code> <code>openstack stack list</code> where 8006 is the port specified by <code>--heat-api-port</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--force-stack-update</code>	Do a virtual update of the ephemeral heat stack (it cannot take real updates). New or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=UPDATE</code> .
<code>--force-stack-create</code>	Do a virtual create of the ephemeral heat stack. new or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=CREATE</code> .

82.6. TRIPLEO VALIDATOR GROUP INFO

Display Information about Validation Groups

Usage:

```

openstack tripleo validator group info [-h]
    [-f {csv,json,table,value,yaml}]
    [-c COLUMN]
    [--quote {all,minimal,none,nonnumeric}]
    [--noindent]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--sort-column SORT_COLUMN]

```

Table 82.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 82.7. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 82.8. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 82.9. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 82.10. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

82.7. TRIPLEO VALIDATOR LIST

List the available validations

Usage:

```
openstack tripleo validator list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--group <group>[,<group>,...]]
```

Table 82.11. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--group <group>[,<group>,...]</code>	List specific group validations, if more than one group is required separate the group names with commas: <code>--group pre-upgrade,prep</code>

Table 82.12. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 82.13. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 82.14. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 82.15. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

82.8. TRIPLEO VALIDATOR RUN

Run the available validations

Usage:

```
openstack tripleo validator run [--plan PLAN] [--workers N]
                               [--extra-vars EXTRA_VARS | --extra-vars-file EXTRA_VARS_FILE]
                               [--validation <validation_id>[,<validation_id>,...] | --group <group>[,
<group>,...])
```

Table 82.16. Optional Arguments

Value	Summary
<code>--plan PLAN, --stack PLAN</code>	Execute the validations using a custom plan name (default: overcloud)
<code>--workers N, -w N</code>	The maximum number of threads that can be used to execute the given validations (default: 1)
<code>--extra-vars EXTRA_VARS</code>	Add a dictionary as extra variable to a validation: <code>--extra-vars {"min_undercloud_ram_gb": 24}</code> (default: <code>{}</code>)

Value	Summary
<code>--extra-vars-file EXTRA_VARS_FILE</code>	Add a json/yaml file containing extra variable to a validation: <code>--extra-vars-file /home/stack/vars.[json</code>
yaml] If using Mistral, only a valid JSON file will be supported. (default:)	<code>--validation <validation_id>[,<validation_id>,...]</code>
Run specific validations, if more than one validation is required separate the names with commas: <code>--validation check-ftype,512e</code>	<code>--validation 512e</code> (default: [])
<code>--group <group>[,<group>,...]</code>	Run specific group validations, if more than one group is required separate the group names with commas: <code>--group pre-upgrade,prep</code>

82.9. TRIPLEO VALIDATOR SHOW PARAMETER

Display Validations Parameters

Usage:

```

openstack tripleo validator show parameter [-h]
                                     [--validation <validation_id>[,<validation_id>,...]]
                                     | --group
                                     <group_id>[,<group_id>,...]]
                                     [--download [json|yaml]
                                     /tmp/myvars] [-f <format>]

```

Table 82.17. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--validation <validation_id>[,<validation_id>,...]</code>	List specific validations, if more than one validation is required separate the names with commas: <code>--validation check-ftype,512e</code>
<code>--validation 512e</code> (default: [])	<code>--group <group_id>[,<group_id>,...]</code>
List specific group validations, if more than one group is required separate the group names with commas: <code>pre-upgrade,prep</code>	<code>openshift-on-openstack</code> (default: [])
<code>--download [json</code>	yaml] /tmp/myvars
Create a json or a yaml file containing all the variables available for the validations: [yaml	json] /tmp/myvars (default: [])

Value	Summary
<code>-f <format>, --format <format></code>	Print representation of the validation. the choices of the output format is json,yaml. (default: json)

82.10. TRIPLEO VALIDATOR SHOW

Display detailed information about a Validation

Usage:

```

openstack tripleo validator show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <validation>

```

Table 82.18. Positional Arguments

Value	Summary
<code><validation></code>	Validation id

Table 82.19. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 82.20. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 82.21. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 82.22. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 82.23. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 83. TRUST

This chapter describes the commands under the **trust** command.

83.1. TRUST CREATE

Create new trust

Usage:

```
openstack trust create [-h] [-f {json,shell,table,value,yaml}]
                      [-c COLUMN] [--noindent] [--prefix PREFIX]
                      [--max-width <integer>] [--fit-width]
                      [--print-empty] --project <project> --role
                      <role> [--impersonate]
                      [--expiration <expiration>]
                      [--project-domain <project-domain>]
                      [--trustor-domain <trustor-domain>]
                      [--trustee-domain <trustee-domain>]
                      <trustor-user> <trustee-user>
```

Table 83.1. Positional Arguments

Value	Summary
<trustor-user>	User that is delegating authorization (name or id)
<trustee-user>	User that is assuming authorization (name or id)

Table 83.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Project being delegated (name or id) (required)
--role <role>	Roles to authorize (name or id) (repeat option to set multiple values, required)
--impersonate	Tokens generated from the trust will represent <trustor> (defaults to False)
--expiration <expiration>	Sets an expiration date for the trust (format of yyyy-mm-ddTHH:MM:SS)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Value	Summary
<code>--trustor-domain <trustor-domain></code>	Domain that contains <trustor> (name or id)
<code>--trustee-domain <trustee-domain></code>	Domain that contains <trustee> (name or id)

Table 83.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 83.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 83.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 83.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

83.2. TRUST DELETE

Delete trust(s)

Usage:

```
openstack trust delete [-h] <trust> [<trust> ...]
```

Table 83.7. Positional Arguments

Value	Summary
<trust>	Trust(s) to delete

Table 83.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

83.3. TRUST LIST

List trusts

Usage:

```
openstack trust list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
```

Table 83.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 83.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 83.11. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 83.12. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 83.13. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

83.4. TRUST SHOW

Display trust details

Usage:

```
openstack trust show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <trust>
```

Table 83.14. Positional Arguments

Value	Summary
<code><trust></code>	Trust to display

Table 83.15. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 83.16. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 83.17. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 83.18. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 83.19. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 84. TSIGKEY

This chapter describes the commands under the **tsigkey** command.

84.1. TSIGKEY CREATE

Create new tsigkey

Usage:

```
openstack tsigkey create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] --name NAME --algorithm
                        ALGORITHM --secret SECRET --scope SCOPE
                        --resource-id RESOURCE_ID [--all-projects]
                        [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
```

Table 84.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tsigkey name
--algorithm ALGORITHM	Tsigkey algorithm
--secret SECRET	Tsigkey secret
--scope SCOPE	Tsigkey scope
--resource-id RESOURCE_ID	Tsigkey resource_id
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 84.2. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 84.3. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 84.4. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 84.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

84.2. TSIGKEY DELETE

Delete tsigkey

Usage:

```
openstack tsigkey delete [-h] [--all-projects] [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        id
```

Table 84.6. Positional Arguments

Value	Summary
id	Tsigkey id

Table 84.7. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

84.3. TSIGKEY LIST

List tsigkeys

Usage:

```

openstack tsigkey list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--name NAME]
                        [--algorithm ALGORITHM] [--scope SCOPE]
                        [--all-projects] [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]

```

Table 84.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tsigkey name
--algorithm ALGORITHM	Tsigkey algorithm
--scope SCOPE	Tsigkey scope
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 84.9. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 84.10. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 84.11. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 84.12. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

84.4. TSIGKEY SET

Set tsigkey properties

Usage:

```
openstack tsigkey set [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--name NAME]
```

```

[--algorithm ALGORITHM] [--secret SECRET]
[--scope SCOPE] [--all-projects] [--edit-managed]
[--sudo-project-id SUDO_PROJECT_ID]
id

```

Table 84.13. Positional Arguments

Value	Summary
id	Tsigkey id

Table 84.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Tsigkey name
--algorithm ALGORITHM	Tsigkey algorithm
--secret SECRET	Tsigkey secret
--scope SCOPE	Tsigkey scope
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 84.15. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 84.16. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 84.17. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 84.18. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

84.5. Tsigkey SHOW

Show tsigkey details

Usage:

```
openstack tsigkey show [-h] [-f {json,shell,table,value,yaml}]
                       [-c COLUMN] [--noindent] [--prefix PREFIX]
                       [--max-width <integer>] [--fit-width]
                       [--print-empty] [--all-projects]
                       [--edit-managed]
                       [--sudo-project-id SUDO_PROJECT_ID]
                       id
```

Table 84.19. Positional Arguments

Value	Summary
id	Tsigkey id

Table 84.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false

Value	Summary
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 84.21. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 84.22. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 84.23. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 84.24. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 85. UNDERCLOUD

This chapter describes the commands under the **undercloud** command.

85.1. UNDERCLOUD BACKUP

Backup the undercloud

Usage:

```
openstack undercloud backup [--add-path ADD_PATH]
                             [--exclude-path EXCLUDE_PATH]
```

Table 85.1. Optional Arguments

Value	Summary
--add-path ADD_PATH	Add additional files to backup. defaults to: /home/stack/ i.e. --add-path /this/is/a/folder/ --add-path /this/is/a/textfile.txt
--exclude-path EXCLUDE_PATH	Exclude path when performing the undercloud backup, this option can be specified multiple times. Defaults to: none i.e. --exclude-path /this/is/a/folder/ --exclude-path /this/is/a/textfile.txt

85.2. UNDERCLOUD DEPLOY

Deploy containerized Undercloud

Usage:

```
openstack undercloud deploy [--templates [TEMPLATES]] [--standalone]
                             [--upgrade] [-y] [--stack STACK]
                             [--output-dir OUTPUT_DIR] [--output-only]
                             [--standalone-role STANDALONE_ROLE]
                             [-t <TIMEOUT>] [-e <HEAT ENVIRONMENT FILE>]
                             [--roles-file ROLES_FILE]
                             [--networks-file NETWORKS_FILE]
                             [--plan-environment-file PLAN_ENVIRONMENT_FILE]
                             [--heat-api-port <HEAT_API_PORT>]
                             [--heat-user <HEAT_USER>]
                             [--deployment-user DEPLOYMENT_USER]
                             [--deployment-python-interpretor DEPLOYMENT_PYTHON_INTERPRETER]
                             [--heat-container-image <HEAT_CONTAINER_IMAGE>]
                             [--heat-native [HEAT_NATIVE]]
                             [--local-ip <LOCAL_IP>]
                             [--control-virtual-ip <CONTROL_VIRTUAL_IP>]
                             [--public-virtual-ip <PUBLIC_VIRTUAL_IP>]
                             [--local-domain <LOCAL_DOMAIN>] [--cleanup]
```



```

[--hieradata-override [HIERADATA_OVERRIDE]]
[--keep-running] [--inflight-validations]
[--force-stack-update | --force-stack-create]

```

Table 85.2. Optional Arguments

Value	Summary
--templates [TEMPLATES]	The directory containing the heat templates to deploy
--standalone	Run deployment as a standalone deployment with no undercloud.
--upgrade	Upgrade an existing deployment.
-y, --yes	Skip yes/no prompt (assume yes).
--stack STACK	Name for the ephemeral (one-time create and forget) heat stack.
--output-dir OUTPUT_DIR	Directory to output state, processed heat templates, ansible deployment files.
--output-only	Do not execute the ansible playbooks. by default the playbooks are saved to the output-dir and then executed.
--standalone-role STANDALONE_ROLE	The role to use for standalone configuration when populating the deployment actions.
-t <TIMEOUT>, --timeout <TIMEOUT>	Deployment timeout in minutes.
-e <HEAT ENVIRONMENT FILE>, --environment-file <HEAT ENVIRONMENT FILE>	Environment files to be passed to the heat stack-create or heat stack-update command. (Can be specified more than once.)
--roles-file ROLES_FILE, -r ROLES_FILE	Roles file, overrides the default roles_data_undercloud.yaml in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
--networks-file NETWORKS_FILE, -n NETWORKS_FILE	Roles file, overrides the default /dev/null in the t-h-t templates directory used for deployment. May be an absolute path or the path relative to the templates dir.
--plan-environment-file PLAN_ENVIRONMENT_FILE, -p PLAN_ENVIRONMENT_FILE	Plan environment file, overrides the default plan-environment.yaml in the --templates directory

Value	Summary
<code>--heat-api-port <HEAT_API_PORT></code>	Heat api port to use for the installers private heat API instance. Optional. Default: 8006.)
<code>--heat-user <HEAT_USER></code>	User to execute the non-privileged heat-all process. Defaults to heat.
<code>--deployment-user DEPLOYMENT_USER</code>	User who executes the tripleo deploy command. defaults to \$SUDO_USER. If \$SUDO_USER is unset it defaults to stack.
<code>--deployment-python-interpreter DEPLOYMENT_PYTHON_INTERPRETER</code>	The path to python interpreter to use for the deployment actions. If not specified the python version of the openstackclient will be used. This may need to be used if deploying on a python2 host from a python3 system or vice versa.
<code>--heat-container-image <HEAT_CONTAINER_IMAGE></code>	The container image to use when launching the heat-all process. Defaults to: tripleomaster/centos-binary-heat-all:current-tripleo
<code>--heat-native [HEAT_NATIVE]</code>	Execute the heat-all process natively on this host. This option requires that the heat-all binaries be installed locally on this machine. This option is enabled by default which means heat-all is executed on the host OS directly.
<code>--local-ip <LOCAL_IP></code>	Local ip/cidr for undercloud traffic. required.
<code>--control-virtual-ip <CONTROL_VIRTUAL_IP></code>	Control plane vip. this allows the undercloud installer to configure a custom VIP on the control plane.
<code>--public-virtual-ip <PUBLIC_VIRTUAL_IP></code>	Public nw vip. this allows the undercloud installer to configure a custom VIP on the public (external) NW.
<code>--local-domain <LOCAL_DOMAIN></code>	Local domain for standalone cloud and its api endpoints
<code>--cleanup</code>	Cleanup temporary files. using this flag will remove the temporary files used during deployment in after the command is run.
<code>--hieradata-override [HIERADATA_OVERRIDE]</code>	Path to hieradata override file. when it points to a heat env file, it is passed in t-h-t via --environment-file. When the file contains legacy instack data, it is wrapped with <role>ExtraConfig and also passed in for t-h-t as a temp file created in --output-dir. Note, instack hiera data may be not t-h-t compatible and will highly likely require a manual revision.

Value	Summary
<code>--keep-running</code>	Keep the ephemeral heat running after the stack operation is complete. This is for debugging purposes only. The ephemeral Heat can be used by openstackclient with: <code>OS_AUTH_TYPE=none</code> <code>OS_ENDPOINT=http://127.0.0.1:8006/v1/admin</code> openstack stack list where 8006 is the port specified by <code>--heat-api-port</code> .
<code>--inflight-validations</code>	Activate in-flight validations during the deploy. in-flight validations provide a robust way to ensure deployed services are running right after their activation. Defaults to False.
<code>--force-stack-update</code>	Do a virtual update of the ephemeral heat stack (it cannot take real updates). New or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=UPDATE</code> .
<code>--force-stack-create</code>	Do a virtual create of the ephemeral heat stack. new or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=CREATE</code> .

85.3. UNDERCLOUD INSTALL

Install and setup the undercloud

Usage:

```
openstack undercloud install [--force-stack-update] [--no-validations]
                             [--dry-run] [-y]
```

Table 85.3. Optional Arguments

Value	Summary
<code>--force-stack-update</code>	Do a virtual update of the ephemeral heat stack. new or failed deployments always have the <code>stack_action=CREATE</code> . This option enforces <code>stack_action=UPDATE</code> .
<code>--no-validations</code>	Do not perform undercloud configuration validations
<code>--dry-run</code>	Print the install command instead of running it
<code>-y, --yes</code>	Skip yes/no prompt (assume yes).

85.4. UNDERCLOUD UPGRADE

Upgrade undercloud

Usage:

```
openstack undercloud upgrade [--force-stack-update] [--no-validations]
                             [--dry-run] [-y]
```

Table 85.4. Optional Arguments

Value	Summary
--force-stack-update	Do a virtual update of the ephemeral heat stack. new or failed deployments always have the stack_action=CREATE. This option enforces stack_action=UPDATE.
--no-validations	Do not perform undercloud configuration validations
--dry-run	Print the install command instead of running it
-y, --yes	Skip yes/no prompt (assume yes).

CHAPTER 86. USAGE

This chapter describes the commands under the **usage** command.

86.1. USAGE LIST

List resource usage per project

Usage:

```
openstack usage list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--start <start>] [--end <end>]
```

Table 86.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--start <start>	Usage range start date, ex 2012-01-20 (default: 4 weeks ago)
--end <end>	Usage range end date, ex 2012-01-20 (default: tomorrow)

Table 86.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 86.3. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 86.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 86.5. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

86.2. USAGE SHOW

Show resource usage for a single project

Usage:

```
openstack usage show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--project <project>]
                    [--start <start>] [--end <end>]
```

Table 86.6. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Name or id of project to show usage for
--start <start>	Usage range start date, ex 2012-01-20 (default: 4 weeks ago)
--end <end>	Usage range end date, ex 2012-01-20 (default: tomorrow)

Table 86.7. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 86.8. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 86.9. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 86.10. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 87. USER

This chapter describes the commands under the **user** command.

87.1. USER CREATE

Create new user

Usage:

```
openstack user create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--domain <domain>]
                    [--project <project>]
                    [--project-domain <project-domain>]
                    [--password <password>] [--password-prompt]
                    [--email <email-address>]
                    [--description <description>]
                    [--enable | --disable] [--or-show]
                    <name>
```

Table 87.1. Positional Arguments

Value	Summary
<name>	New user name

Table 87.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Default domain (name or id)
--project <project>	Default project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--password <password>	Set user password
--password-prompt	Prompt interactively for password
--email <email-address>	Set user email address
--description <description>	User description

Value	Summary
<code>--enable</code>	Enable user (default)
<code>--disable</code>	Disable user
<code>--or-show</code>	Return existing user

Table 87.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 87.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 87.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 87.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

87.2. USER DELETE

Delete user(s)

Usage:

```
openstack user delete [-h] [--domain <domain>] <user> [<user> ...]
```

Table 87.7. Positional Arguments

Value	Summary
<user>	User(s) to delete (name or id)

Table 87.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Domain owning <user> (name or id)

87.3. USER LIST

List users

Usage:

```
openstack user list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>] [--fit-width]
                    [--print-empty] [--sort-column SORT_COLUMN]
                    [--domain <domain>]
                    [--group <group> | --project <project>] [--long]
```

Table 87.9. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--domain <domain>	Filter users by <domain> (name or id)
--group <group>	Filter users by <group> membership (name or id)
--project <project>	Filter users by <project> (name or id)
--long	List additional fields in output

Table 87.10. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 87.11. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 87.12. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 87.13. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

87.4. USER PASSWORD SET

Change current user password

Usage:

```
openstack user password set [-h] [--password <new-password>]
                             [--original-password <original-password>]
```

Table 87.14. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--password <new-password>	New user password
--original-password <original-password>	Original user password

87.5. USER SET

Set user properties

Usage:

```
openstack user set [-h] [--name <name>] [--domain <domain>]
                  [--project <project>]
                  [--project-domain <project-domain>]
                  [--password <password>] [--password-prompt]
                  [--email <email-address>]
                  [--description <description>] [--enable | --disable]
                  <user>
```

Table 87.15. Positional Arguments

Value	Summary
<user>	User to modify (name or id)

Table 87.16. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set user name
--domain <domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.
--project <project>	Set default project (name or id)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--password <password>	Set user password

Value	Summary
<code>--password-prompt</code>	Prompt interactively for password
<code>--email <email-address></code>	Set user email address
<code>--description <description></code>	Set user description
<code>--enable</code>	Enable user (default)
<code>--disable</code>	Disable user

87.6. USER SHOW

Display user details

Usage:

```
openstack user show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--domain <domain>]
                    <user>
```

Table 87.17. Positional Arguments

Value	Summary
<code><user></code>	User to display (name or id)

Table 87.18. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--domain <domain></code>	Domain owning <code><user></code> (name or id)

Table 87.19. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 87.20. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 87.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 87.22. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 88. VERSIONS

This chapter describes the commands under the **versions** command.

88.1. VERSIONS SHOW

Show available versions of services

Usage:

```
openstack versions show [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--all-interfaces | --interface <interface>]
                        [--region-name <region_name>]
                        [--service <region_name>]
                        [--status <region_name>]
```

Table 88.1. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-interfaces	Show values for all interfaces
--interface <interface>	Show versions for a specific interface.
--region-name <region_name>	Show versions for a specific region.
--service <region_name>	Show versions for a specific service.
--status <region_name>	Show versions for a specific status. [valid values are SUPPORTED, CURRENT, DEPRECATED, EXPERIMENTAL]

Table 88.2. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 88.3. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 88.4. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 88.5. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

CHAPTER 89. VOLUME

This chapter describes the commands under the **volume** command.

89.1. VOLUME BACKEND CAPABILITY SHOW

Show capability command

Usage:

```
openstack volume backend capability show [-h]
                                         [-f {csv,json,table,value,yaml}]
                                         [-c COLUMN]
                                         [--quote {all,minimal,none,nonnumeric}]
                                         [--noindent]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--sort-column SORT_COLUMN]
                                         <host>
```

Table 89.1. Positional Arguments

Value	Summary
<host>	List capabilities of specified host (host@backend-name)

Table 89.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 89.4. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 89.5. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

89.2. VOLUME BACKEND POOL LIST

List pool command

Usage:

```
openstack volume backend pool list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--noindent] [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--sort-column SORT_COLUMN] [--long]
```

Table 89.7. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--long</code>	Show detailed information about pools.

Table 89.8. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 89.9. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.10. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.11. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.3. VOLUME BACKUP CREATE

Create new volume backup

Usage:

```
openstack volume backup create [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
```

```

[--print-empty] [--name <name>]
[--description <description>]
[--container <container>]
[--snapshot <snapshot>] [--force]
[--incremental]
<volume>

```

Table 89.12. Positional Arguments

Value	Summary
<volume>	Volume to backup (name or id)

Table 89.13. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Name of the backup
--description <description>	Description of the backup
--container <container>	Optional backup container name
--snapshot <snapshot>	Snapshot to backup (name or id)
--force	Allow to back up an in-use volume
--incremental	Perform an incremental backup

Table 89.14. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.15. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.16. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.17. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.4. VOLUME BACKUP DELETE

Delete volume backup(s)

Usage:

```
openstack volume backup delete [-h] [--force] <backup> [<backup> ...]
```

Table 89.18. Positional Arguments

Value	Summary
<backup>	Backup(s) to delete (name or id)

Table 89.19. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Allow delete in state other than error or available

89.5. VOLUME BACKUP LIST

List volume backups

Usage:

```

openstack volume backup list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN] [--long]
                             [--name <name>] [--status <status>]
                             [--volume <volume>]
                             [--marker <volume-backup>]
                             [--limit <num-backups>] [--all-projects]

```

Table 89.20. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--name <name>	Filters results by the backup name
--status <status>	Filters results by the backup status (<i>creating, available, deleting, error, restoring or error_restoring</i>)
--volume <volume>	Filters results by the volume which they backup (name or ID)
--marker <volume-backup>	The last backup of the previous page (name or id)
--limit <num-backups>	Maximum number of backups to display
--all-projects	Include all projects (admin only)

Table 89.21. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 89.22. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 89.23. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.24. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

89.6. VOLUME BACKUP RECORD EXPORT

Export volume backup details. Backup information can be imported into a new service instance to be able to restore.

Usage:

```
openstack volume backup record export [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <backup>
```

Table 89.25. Positional Arguments

Value	Summary
<code><backup></code>	Backup to export (name or id)

Table 89.26. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.27. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.28. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.29. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.30. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.7. VOLUME BACKUP RECORD IMPORT

Import volume backup details. Exported backup details contain the metadata necessary to restore to a new or rebuilt service instance

Usage:


```

openstack volume backup record import [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <backup_service>
                                     <backup_metadata>

```

Table 89.31. Positional Arguments

Value	Summary
<backup_service>	Backup service containing the backup.
<backup_metadata>	Encoded backup metadata from export.

Table 89.32. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.33. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.34. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.35. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.36. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

89.8. VOLUME BACKUP RESTORE

Restore volume backup

Usage:

```
openstack volume backup restore [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty]
                                <backup> <volume>
```

Table 89.37. Positional Arguments

Value	Summary
<code><backup></code>	Backup to restore (name or id)
<code><volume></code>	Volume to restore to (name or id)

Table 89.38. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Table 89.39. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 89.40. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.41. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 89.42. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

89.9. VOLUME BACKUP SET

Set volume backup properties

Usage:

```
openstack volume backup set [-h] [--name <name>]
                             [--description <description>]
                             [--state <state>]
                             <backup>
```

Table 89.43. Positional Arguments

Value	Summary
<code><backup></code>	Backup to modify (name or id)

Table 89.44. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New backup name
--description <description>	New backup description
--state <state>	New backup state ("available" or "error") (admin only) (This option simply changes the state of the backup in the database with no regard to actual status, exercise caution when using)

89.10. VOLUME BACKUP SHOW

Display volume backup details

Usage:

```
openstack volume backup show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             <backup>
```

Table 89.45. Positional Arguments

Value	Summary
<backup>	Backup to display (name or id)

Table 89.46. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.47. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.48. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.49. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.50. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.11. VOLUME CREATE

Create new volume

Usage:

```
openstack volume create [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--size <size>]
                        [--type <volume-type>]
                        [--image <image> | --snapshot <snapshot> | --source <volume>]
                        [--description <description>]
                        [--availability-zone <availability-zone>]
                        [--consistency-group consistency-group]
                        [--property <key=value>] [--hint <key=value>]
                        [--multi-attach] [--bootable | --non-bootable]
                        [--read-only | --read-write]
                        <name>
```

Table 89.51. Positional Arguments

Value	Summary
<name>	Volume name

Table 89.52. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--size <size>	Volume size in gb (required unless --snapshot or --source is specified)
--type <volume-type>	Set the type of volume
--image <image>	Use <image> as source of volume (name or id)
--snapshot <snapshot>	Use <snapshot> as source of volume (name or id)
--source <volume>	Volume to clone (name or id)
--description <description>	Volume description
--availability-zone <availability-zone>	Create volume in <availability-zone>
--consistency-group consistency-group>	Consistency group where the new volume belongs to
--property <key=value>	Set a property to this volume (repeat option to set multiple properties)
--hint <key=value>	Arbitrary scheduler hint key-value pairs to help boot an instance (repeat option to set multiple hints)
--multi-attach	Allow volume to be attached more than once (default to False)
--bootable	Mark volume as bootable
--non-bootable	Mark volume as non-bootable (default)
--read-only	Set volume to read-only access mode
--read-write	Set volume to read-write access mode (default)

Table 89.53. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.54. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.55. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.56. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.12. VOLUME DELETE

Delete volume(s)

Usage:

```
openstack volume delete [-h] [--force | --purge]
                        <volume> [<volume> ...]
```

Table 89.57. Positional Arguments

Value	Summary
<volume>	Volume(s) to delete (name or id)

Table 89.58. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Attempt forced removal of volume(s), regardless of state (defaults to False)
--purge	Remove any snapshots along with volume(s) (defaults to false)

89.13. VOLUME HOST FAILOVER

Failover volume host to different backend

Usage:

```
openstack volume host failover [-h] --volume-backend <backend-id>
                               <host-name>
```

Table 89.59. Positional Arguments

Value	Summary
<host-name>	Name of volume host

Table 89.60. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--volume-backend <backend-id>	The id of the volume backend replication target where the host will failover to (required)

89.14. VOLUME HOST SET

Set volume host properties

Usage:

```
openstack volume host set [-h] [--disable | --enable] <host-name>
```


Table 89.61. Positional Arguments

Value	Summary
<host-name>	Name of volume host

Table 89.62. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--disable	Freeze and disable the specified volume host
--enable	Thaw and enable the specified volume host

89.15. VOLUME LIST

List volumes

Usage:

```
openstack volume list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                    [--quote {all,minimal,none,nonnumeric}]
                    [--noindent] [--max-width <integer>]
                    [--fit-width] [--print-empty]
                    [--sort-column SORT_COLUMN] [--project <project>]
                    [--project-domain <project-domain>]
                    [--user <user>] [--user-domain <user-domain>]
                    [--name <name>] [--status <status>]
                    [--all-projects] [--long] [--marker <volume>]
                    [--limit <num-volumes>]
```

Table 89.63. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--project <project>	Filter results by project (name or id) (admin only)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--user <user>	Filter results by user (name or id) (admin only)
--user-domain <user-domain>	Domain the user belongs to (name or id). this can be used in case collisions between user names exist.

Value	Summary
--name <name>	Filter results by volume name
--status <status>	Filter results by status
--all-projects	Include all projects (admin only)
--long	List additional fields in output
--marker <volume>	The last volume id of the previous page
--limit <num-volumes>	Maximum number of volumes to display

Table 89.64. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 89.65. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.66. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.67. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

89.16. VOLUME MIGRATE

Migrate volume to a new host

Usage:

```
openstack volume migrate [-h] --host <host> [--force-host-copy]
                        [--lock-volume]
                        <volume>
```

Table 89.68. Positional Arguments

Value	Summary
<code><volume></code>	Volume to migrate (name or id)

Table 89.69. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--host <host></code>	Destination host (takes the form: <code>host@backend-name#pool</code>)
<code>--force-host-copy</code>	Enable generic host-based force-migration, which bypasses driver optimizations
<code>--lock-volume</code>	If specified, the volume state will be locked and will not allow a migration to be aborted (possibly by another operation)

89.17. VOLUME QOS ASSOCIATE

Associate a QoS specification to a volume type

Usage:

```
openstack volume qos associate [-h] <qos-spec> <volume-type>
```

Table 89.70. Positional Arguments

Value	Summary
<qos-spec>	Qos specification to modify (name or id)
<volume-type>	Volume type to associate the qos (name or id)

Table 89.71. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

89.18. VOLUME QOS CREATE

Create new QoS specification

Usage:

```
openstack volume qos create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--consumer <consumer>]
                             [--property <key=value>]
                             <name>
```

Table 89.72. Positional Arguments

Value	Summary
<name>	New qos specification name

Table 89.73. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--consumer <consumer>	Consumer of the qos. valid consumers: back-end, both, front-end (defaults to <i>both</i>)
--property <key=value>	Set a qos specification property (repeat option to set multiple properties)

Table 89.74. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.75. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.76. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.77. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.19. VOLUME QOS DELETE

Delete QoS specification

Usage:

```
openstack volume qos delete [-h] [--force] <qos-spec> [<qos-spec> ...]
```

Table 89.78. Positional Arguments

Value	Summary
<qos-spec>	Qos specification(s) to delete (name or id)

Table 89.79. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--force	Allow to delete in-use qos specification(s)

89.20. VOLUME QOS DISASSOCIATE

Disassociate a QoS specification from a volume type

Usage:

```
openstack volume qos disassociate [-h]
                                [--volume-type <volume-type> | --all]
                                <qos-spec>
```

Table 89.80. Positional Arguments

Value	Summary
<qos-spec>	Qos specification to modify (name or id)

Table 89.81. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--volume-type <volume-type>	Volume type to disassociate the qos from (name or id)
--all	Disassociate the qos from every volume type

89.21. VOLUME QOS LIST

List QoS specifications

Usage:

```
openstack volume qos list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
```

```

[--quote {all,minimal,none,nonnumeric}]
[--noindent] [--max-width <integer>]
[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]

```

Table 89.82. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.83. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 89.84. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.85. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.86. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

89.22. VOLUME QOS SET

Set QoS specification properties

Usage:

```
openstack volume qos set [-h] [--property <key=value>] <qos-spec>
```

Table 89.87. Positional Arguments

Value	Summary
<code><qos-spec></code>	Qos specification to modify (name or id)

Table 89.88. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--property <key=value></code>	Property to add or modify for this qos specification (repeat option to set multiple properties)

89.23. VOLUME QOS SHOW

Display QoS specification details

Usage:

```
openstack volume qos show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty]
                          <qos-spec>
```

Table 89.89. Positional Arguments

Value	Summary
<qos-spec>	Qos specification to display (name or id)

Table 89.90. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.91. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.92. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.93. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.94. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.24. VOLUME QOS UNSET

Unset QoS specification properties

Usage:

```
openstack volume qos unset [-h] [--property <key>] <qos-spec>
```

Table 89.95. Positional Arguments

Value	Summary
<qos-spec>	Qos specification to modify (name or id)

Table 89.96. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from the qos specification. (repeat option to unset multiple properties)

89.25. VOLUME SERVICE LIST

List service command

Usage:

```
openstack volume service list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
                               [--sort-column SORT_COLUMN]
                               [--host <host>] [--service <service>]
                               [--long]
```

Table 89.97. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--host <host>	List services on specified host (name only)
--service <service>	List only specified service (name only)
--long	List additional fields in output

Table 89.98. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 89.99. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.100. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.101. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.26. VOLUME SERVICE SET

Set volume service properties

Usage:

```
openstack volume service set [-h] [--enable | --disable]
                             [--disable-reason <reason>]
                             <host> <service>
```

Table 89.102. Positional Arguments

Value	Summary
<host>	Name of host
<service>	Name of service (binary name)

Table 89.103. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--enable	Enable volume service
--disable	Disable volume service
--disable-reason <reason>	Reason for disabling the service (should be used with --disable option)

89.27. VOLUME SET

Set volume properties

Usage:

```
openstack volume set [-h] [--name <name>] [--size <size>]
                    [--description <description>] [--no-property]
                    [--property <key=value>]
                    [--image-property <key=value>] [--state <state>]
                    [--attached | --detached] [--type <volume-type>]
                    [--retype-policy <retype-policy>]
                    [--bootable | --non-bootable]
                    [--read-only | --read-write]
                    <volume>
```

Table 89.104. Positional Arguments

Value	Summary
<volume>	Volume to modify (name or id)

Table 89.105. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New volume name
--size <size>	Extend volume size in gb
--description <description>	New volume description
--no-property	Remove all properties from <volume> (specify both --no-property and --property to remove the current properties before setting new properties.)
--property <key=value>	Set a property on this volume (repeat option to set multiple properties)
--image-property <key=value>	Set an image property on this volume (repeat option to set multiple image properties)
--state <state>	New volume state ("available", "error", "creating", "deleting", "in-use", "attaching", "detaching", "error_deleting" or "maintenance") (admin only) (This option simply changes the state of the volume in the database with no regard to actual status, exercise caution when using)
--attached	Set volume attachment status to "attached" (admin only) (This option simply changes the state of the volume in the database with no regard to actual status, exercise caution when using)
--detached	Set volume attachment status to "detached" (admin only) (This option simply changes the state of the volume in the database with no regard to actual status, exercise caution when using)
--type <volume-type>	New volume type (name or id)
--retype-policy <retype-policy>	Migration policy while re-typing volume ("never" or "on-demand", default is "never") (available only when --type option is specified)
--bootable	Mark volume as bootable
--non-bootable	Mark volume as non-bootable
--read-only	Set volume to read-only access mode

Value	Summary
--read-write	Set volume to read-write access mode

89.28. VOLUME SHOW

Display volume details

Usage:

```
openstack volume show [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty]
                    <volume>
```

Table 89.106. Positional Arguments

Value	Summary
<volume>	Volume to display (name or id)

Table 89.107. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.108. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.109. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.110. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.111. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.29. VOLUME SNAPSHOT CREATE

Create new volume snapshot

Usage:

```
openstack volume snapshot create [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] [--volume <volume>]
                                [--description <description>]
                                [--force] [--property <key=value>]
                                [--remote-source <key=value>]
                                <snapshot-name>
```

Table 89.112. Positional Arguments

Value	Summary
<snapshot-name>	Name of the new snapshot

Table 89.113. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--volume <volume></code>	Volume to snapshot (name or id) (default is <snapshot- name>)
<code>--description <description></code>	Description of the snapshot
<code>--force</code>	Create a snapshot attached to an instance. default is False
<code>--property <key=value></code>	Set a property to this snapshot (repeat option to set multiple properties)
<code>--remote-source <key=value></code>	The attribute(s) of the existing remote volume snapshot (admin required) (repeat option to specify multiple attributes) e.g.: <code>--remote-source source-name=test_name --remote-source source-id=test_id</code>

Table 89.114. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 89.115. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.116. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 89.117. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

89.30. VOLUME SNAPSHOT DELETE

Delete volume snapshot(s)

Usage:

```
openstack volume snapshot delete [-h] [--force]
                                <snapshot> [<snapshot> ...]
```

Table 89.118. Positional Arguments

Value	Summary
<code><snapshot></code>	Snapshot(s) to delete (name or id)

Table 89.119. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--force</code>	Attempt forced removal of snapshot(s), regardless of state (defaults to False)

89.31. VOLUME SNAPSHOT LIST

List volume snapshots

Usage:

```
openstack volume snapshot list [-h] [-f {csv,json,table,value,yaml}]
                               [-c COLUMN]
                               [--quote {all,minimal,none,nonnumeric}]
                               [--noindent] [--max-width <integer>]
                               [--fit-width] [--print-empty]
```

```

[--sort-column SORT_COLUMN]
[--all-projects] [--project <project>]
[--project-domain <project-domain>]
[--long] [--marker <volume-snapshot>]
[--limit <num-snapshots>]
[--name <name>] [--status <status>]
[--volume <volume>]

```

Table 89.120. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Include all projects (admin only)
--project <project>	Filter results by project (name or id) (admin only)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--long	List additional fields in output
--marker <volume-snapshot>	The last snapshot id of the previous page
--limit <num-snapshots>	Maximum number of snapshots to display
--name <name>	Filters results by a name.
--status <status>	Filters results by a status. (<i>available, error, creating, deleting or error-deleting</i>)
--volume <volume>	Filters results by a volume (name or id).

Table 89.121. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 89.122. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 89.123. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 89.124. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

89.32. VOLUME SNAPSHOT SET

Set volume snapshot properties

Usage:

```
openstack volume snapshot set [-h] [--name <name>]
                               [--description <description>]
                               [--no-property] [--property <key=value>]
                               [--state <state>]
                               <snapshot>
```

Table 89.125. Positional Arguments

Value	Summary
<code><snapshot></code>	Snapshot to modify (name or id)

Table 89.126. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New snapshot name
--description <description>	New snapshot description
--no-property	Remove all properties from <snapshot> (specify both --no-property and --property to remove the current properties before setting new properties.)
--property <key=value>	Property to add/change for this snapshot (repeat option to set multiple properties)
--state <state>	New snapshot state. ("available", "error", "creating", "deleting", or "error_deleting") (admin only) (This option simply changes the state of the snapshot in the database with no regard to actual status, exercise caution when using)

89.33. VOLUME SNAPSHOT SHOW

Display volume snapshot details

Usage:

```
openstack volume snapshot show [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty]
                               <snapshot>
```

Table 89.127. Positional Arguments

Value	Summary
<snapshot>	Snapshot to display (name or id)

Table 89.128. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.129. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.130. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.131. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.132. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.34. VOLUME SNAPSHOT UNSET

Unset volume snapshot properties

Usage:

```
openstack volume snapshot unset [-h] [--property <key>] <snapshot>
```

Table 89.133. Positional Arguments

Value	Summary
<snapshot>	Snapshot to modify (name or id)

Table 89.134. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Property to remove from snapshot (repeat option to remove multiple properties)

89.35. VOLUME TRANSFER REQUEST ACCEPT

Accept volume transfer request.

Usage:

```

openstack volume transfer request accept [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
                                         [--fit-width] [--print-empty]
                                         [--auth-key <key>]
                                         <transfer-request-id>

```

Table 89.135. Positional Arguments

Value	Summary
<transfer-request-id>	Volume transfer request to accept (id only)

Table 89.136. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--auth-key <key>	Volume transfer request authentication key

Table 89.137. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.138. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.139. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.140. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.36. VOLUME TRANSFER REQUEST CREATE

Create volume transfer request.

Usage:

```
openstack volume transfer request create [-h]
                                         [-f {json,shell,table,value,yaml}]
                                         [-c COLUMN] [--noindent]
                                         [--prefix PREFIX]
                                         [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--name <name>]
<volume>

```

Table 89.141. Positional Arguments

Value	Summary
<volume>	Volume to transfer (name or id)

Table 89.142. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	New transfer request name (default to none)

Table 89.143. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.144. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.145. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.146. Table Formatter

Value	Summary
-------	---------

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

89.37. VOLUME TRANSFER REQUEST DELETE

Delete volume transfer request(s).

Usage:

```
openstack volume transfer request delete [-h]
                                     <transfer-request>
                                     [<transfer-request> ...]
```

Table 89.147. Positional Arguments

Value	Summary
<code><transfer-request></code>	Volume transfer request(s) to delete (name or id)

Table 89.148. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

89.38. VOLUME TRANSFER REQUEST LIST

Lists all volume transfer requests.

Usage:

```
openstack volume transfer request list [-h]
                                       [-f {csv,json,table,value,yaml}]
                                       [-c COLUMN]
                                       [--quote {all,minimal,none,nonnumeric}]
                                       [--noindent]
                                       [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--sort-column SORT_COLUMN]
[--all-projects]

```

Table 89.149. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Include all projects (admin only)

Table 89.150. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 89.151. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.152. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.153. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.39. VOLUME TRANSFER REQUEST SHOW

Show volume transfer request details.

Usage:

```
openstack volume transfer request show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     <transfer-request>
```

Table 89.154. Positional Arguments

Value	Summary
<transfer-request>	Volume transfer request to display (name or id)

Table 89.155. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 89.156. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.157. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.158. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.159. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.40. VOLUME TYPE CREATE

Create new volume type

Usage:

```
openstack volume type create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             [--description <description>]
                             [--public | --private]
                             [--property <key=value>]
                             [--project <project>]
                             [--encryption-provider <provider>]
                             [--encryption-cipher <cipher>]
                             [--encryption-key-size <key-size>]
                             [--encryption-control-location <control-location>]
                             [--project-domain <project-domain>]
                             <name>
```

Table 89.160. Positional Arguments

Value	Summary
<name>	Volume type name

Table 89.161. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description <description>	Volume type description
--public	Volume type is accessible to the public
--private	Volume type is not accessible to the public
--property <key=value>	Set a property on this volume type (repeat option to set multiple properties)
--project <project>	Allow <project> to access private type (name or id) (Must be used with --private option)
--encryption-provider <provider>	Set the encryption provider format for this volume type (e.g "luks" or "plain") (admin only) (This option is required when setting encryption type of a volume. Consider using other encryption options such as: "--encryption-cipher", "--encryption-key-size" and "--encryption-control-location")
--encryption-cipher <cipher>	Set the encryption algorithm or mode for this volume type (e.g "aes-xts-plain64") (admin only)
--encryption-key-size <key-size>	Set the size of the encryption key of this volume type (e.g "128" or "256") (admin only)
--encryption-control-location <control-location>	Set the notional service where the encryption is performed ("front-end" or "back-end") (admin only) (The default value for this option is "front-end" when setting encryption type of a volume. Consider using other encryption options such as: "--encryption-cipher", "--encryption-key-size" and "--encryption-provider")
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.

Table 89.162. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 89.163. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.164. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.165. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.41. VOLUME TYPE DELETE

Delete volume type(s)

Usage:

```
openstack volume type delete [-h] <volume-type> [<volume-type> ...]
```

Table 89.166. Positional Arguments

Value	Summary
<volume-type>	Volume type(s) to delete (name or id)

Table 89.167. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

89.42. VOLUME TYPE LIST

List volume types

Usage:

```
openstack volume type list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN] [--long]
                          [--default | --public | --private]
                          [--encryption-type]
```

Table 89.168. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--long	List additional fields in output
--default	List the default volume type
--public	List only public types
--private	List only private types (admin only)
--encryption-type	Display encryption information for each volume type (admin only)

Table 89.169. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 89.170. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 89.171. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.172. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.43. VOLUME TYPE SET

Set volume type properties

Usage:

```
openstack volume type set [-h] [--name <name>]
                        [--description <description>]
```



```

[--property <key=value>]
[--project <project>]
[--project-domain <project-domain>]
[--encryption-provider <provider>]
[--encryption-cipher <cipher>]
[--encryption-key-size <key-size>]
[--encryption-control-location <control-location>]
<volume-type>

```

Table 89.173. Positional Arguments

Value	Summary
<volume-type>	Volume type to modify (name or id)

Table 89.174. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name <name>	Set volume type name
--description <description>	Set volume type description
--property <key=value>	Set a property on this volume type (repeat option to set multiple properties)
--project <project>	Set volume type access to project (name or id) (admin only)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--encryption-provider <provider>	Set the encryption provider format for this volume type (e.g "luks" or "plain") (admin only) (This option is required when setting encryption type of a volume for the first time. Consider using other encryption options such as: "--encryption-cipher", "--encryption-key-size" and "--encryption-control-location")
--encryption-cipher <cipher>	Set the encryption algorithm or mode for this volume type (e.g "aes-xts-plain64") (admin only)
--encryption-key-size <key-size>	Set the size of the encryption key of this volume type (e.g "128" or "256") (admin only)

Value	Summary
<code>--encryption-control-location <control-location></code>	Set the notional service where the encryption is performed ("front-end" or "back-end") (admin only) (The default value for this option is "front-end" when setting encryption type of a volume for the first time. Consider using other encryption options such as: "--encryption-cipher", "--encryption-key-size" and "--encryption-provider")

89.44. VOLUME TYPE SHOW

Display volume type details

Usage:

```
openstack volume type show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--encryption-type]
                          <volume-type>
```

Table 89.175. Positional Arguments

Value	Summary
<code><volume-type></code>	Volume type to display (name or id)

Table 89.176. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--encryption-type</code>	Display encryption information of this volume type (admin only)

Table 89.177. Output Formatters

Value	Summary
<code>output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 89.178. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 89.179. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 89.180. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

89.45. VOLUME TYPE UNSET

Unset volume type properties

Usage:

```
openstack volume type unset [-h] [--property <key>]
                             [--project <project>]
                             [--project-domain <project-domain>]
                             [--encryption-type]
                             <volume-type>
```

Table 89.181. Positional Arguments

Value	Summary
<volume-type>	Volume type to modify (name or id)

Table 89.182. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Remove a property from this volume type (repeat option to remove multiple properties)
--project <project>	Removes volume type access to project (name or id) (admin only)
--project-domain <project-domain>	Domain the project belongs to (name or id). this can be used in case collisions between project names exist.
--encryption-type	Remove the encryption type for this volume type (admin only)

89.46. VOLUME UNSET

Unset volume properties

Usage:

```
openstack volume unset [-h] [--property <key>] [--image-property <key>]
                        <volume>
```

Table 89.183. Positional Arguments

Value	Summary
<volume>	Volume to modify (name or id)

Table 89.184. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--property <key>	Remove a property from volume (repeat option to remove multiple properties)
--image-property <key>	Remove an image property from volume (repeat option to remove multiple image properties)

CHAPTER 90. WORKBOOK

This chapter describes the commands under the **workbook** command.

90.1. WORKBOOK CREATE

Create new workbook.

Usage:

```
openstack workbook create [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--public]
                          [--namespace [NAMESPACE]]
                          definition
```

Table 90.1. Positional Arguments

Value	Summary
definition	Workbook definition file

Table 90.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--public	With this flag workbook will be marked as "public".
--namespace [NAMESPACE]	Namespace to create the workbook within.

Table 90.3. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 90.4. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 90.5. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 90.6. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

90.2. WORKBOOK DEFINITION SHOW

Show workbook definition.

Usage:

```
openstack workbook definition show [-h] name
```

Table 90.7. Positional Arguments

Value	Summary
name	Workbook name

Table 90.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

90.3. WORKBOOK DELETE

Delete workbook.

Usage:

```
openstack workbook delete [-h] [--namespace [NAMESPACE]]
                        workbook [workbook ...]
```

Table 90.9. Positional Arguments

Value	Summary
workbook	Name of workbook(s).

Table 90.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to delete the workbook(s) from.

90.4. WORKBOOK LIST

List all workbooks.

Usage:

```
openstack workbook list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN] [--marker [MARKER]]
                        [--limit [LIMIT]] [--sort_keys [SORT_KEYS]]
                        [--sort_dirs [SORT_DIRS]] [--filter FILTERS]
```

Table 90.11. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description

Value	Summary
<code>--sort_dirs [SORT_DIRS]</code>	Comma-separated list of sort directions. default: asc. Example: <code>mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc</code>
<code>--filter FILTERS</code>	Filters. can be repeated.

Table 90.12. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 90.13. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 90.14. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 90.15. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

90.5. WORKBOOK SHOW

Show specific workbook.

Usage:

```
openstack workbook show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--namespace [NAMESPACE]]
                        workbook
```

Table 90.16. Positional Arguments

Value	Summary
workbook	Workbook name

Table 90.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to get the workbook from.

Table 90.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 90.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 90.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Value	Summary
-------	---------

Table 90.21. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

90.6. WORKBOOK UPDATE

Update workbook.

Usage:

```

openstack workbook update [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--namespace [NAMESPACE]]
                          [--public]
                          definition

```

Table 90.22. Positional Arguments

Value	Summary
definition	Workbook definition file

Table 90.23. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--namespace [NAMESPACE]</code>	Namespace to update the workbook in.
<code>--public</code>	With this flag workbook will be marked as "public".

Table 90.24. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 90.25. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 90.26. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 90.27. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

90.7. WORKBOOK VALIDATE

Validate workbook.

Usage:

```
openstack workbook validate [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             definition
```

Table 90.28. Positional Arguments

Value	Summary
definition	Workbook definition file

Table 90.29. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 90.30. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 90.31. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 90.32. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 90.33. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable

Value	Summary
--print-empty	Print empty table if there is no data to show.

CHAPTER 91. WORKFLOW

This chapter describes the commands under the **workflow** command.

91.1. WORKFLOW CREATE

Create new workflow.

Usage:

```
openstack workflow create [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
                        [--sort-column SORT_COLUMN]
                        [--marker [MARKER]] [--limit [LIMIT]]
                        [--sort_keys [SORT_KEYS]]
                        [--sort_dirs [SORT_DIRS]] [--filter FILTERS]
                        [--namespace [NAMESPACE]] [--public]
                        definition
```

Table 91.1. Positional Arguments

Value	Summary
definition	Workflow definition file.

Table 91.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Value	Summary
<code>--namespace [NAMESPACE]</code>	Namespace to create the workflow within.
<code>--public</code>	With this flag workflow will be marked as "public".

Table 91.3. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 91.4. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 91.5. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.6. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

91.2. WORKFLOW DEFINITION SHOW

Show workflow definition.

Usage:

```
openstack workflow definition show [-h] [--namespace [NAMESPACE]]
                                identifier
```

Table 91.7. Positional Arguments

Value	Summary
identifier	Workflow id or name.

Table 91.8. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to get the workflow from.

91.3. WORKFLOW DELETE

Delete workflow.

Usage:

```
openstack workflow delete [-h] [--namespace [NAMESPACE]]
                          workflow [workflow ...]
```

Table 91.9. Positional Arguments

Value	Summary
workflow	Name or id of workflow(s).

Table 91.10. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to delete the workflow from.

91.4. WORKFLOW ENGINE SERVICE LIST

List all services.

Usage:

```

openstack workflow engine service list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--marker [MARKER]]
                                     [--limit [LIMIT]]
                                     [--sort_keys [SORT_KEYS]]
                                     [--sort_dirs [SORT_DIRS]]
                                     [--filter FILTERS]

```

Table 91.11. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Table 91.12. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 91.13. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 91.14. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.15. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

91.5. WORKFLOW ENV CREATE

Create new environment.

Usage:

```
openstack workflow env create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             file
```

Table 91.16. Positional Arguments

Value	Summary
file	Environment configuration file in json or yaml

Table 91.17. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 91.18. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 91.19. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.20. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 91.21. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.6. WORKFLOW ENV DELETE

Delete environment.

Usage:

```
openstack workflow env delete [-h] environment [environment ...]
```

Table 91.22. Positional Arguments

Value	Summary
environment	Name of environment(s).

Table 91.23. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

91.7. WORKFLOW ENV LIST

List all environments.

Usage:

```
openstack workflow env list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--marker [MARKER]] [--limit [LIMIT]]
                             [--sort_keys [SORT_KEYS]]
                             [--sort_dirs [SORT_DIRS]]
                             [--filter FILTERS]
```

Table 91.24. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.

Value	Summary
<code>--sort_keys [SORT_KEYS]</code>	Comma-separated list of sort keys to sort results by. Default: <code>created_at</code> . Example: <code>mistral execution-list --sort_keys=id,description</code>
<code>--sort_dirs [SORT_DIRS]</code>	Comma-separated list of sort directions. default: <code>asc</code> . Example: <code>mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc</code>
<code>--filter FILTERS</code>	Filters. can be repeated.

Table 91.25. Output Formatters

Value	Summary
output formatter options-f { <code>csv,json,table,value,yaml</code> }, <code>--format</code> { <code>csv,json,table,value,yaml</code> }	The output format, defaults to <code>table</code>
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 91.26. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to <code>nonnumeric</code>

Table 91.27. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.28. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <code><1</code> to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

91.8. WORKFLOW ENV SHOW

Show specific environment.

Usage:

```

openstack workflow env show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--export]
                             environment

```

Table 91.29. Positional Arguments

Value	Summary
<code>environment</code>	Environment name

Table 91.30. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--export</code>	Export the environment suitable for import

Table 91.31. Output Formatters

Value	Summary
output formatter options- <code>f {json,shell,table,value,yaml}, --format</code> <code>{json,shell,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 91.32. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.33. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 91.34. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

91.9. WORKFLOW ENV UPDATE

Update environment.

Usage:

```
openstack workflow env update [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             file
```

Table 91.35. Positional Arguments

Value	Summary
file	Environment configuration file in json or yaml

Table 91.36. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 91.37. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 91.38. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.39. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 91.40. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.10. WORKFLOW EXECUTION CREATE

Create new execution.

Usage:

-


```

openstack workflow execution create [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--namespace [NAMESPACE]]
                                   [-d DESCRIPTION]
                                   [-s [SOURCE_EXECUTION_ID]]
                                   [workflow_identifier]
                                   [workflow_input] [params]

```

Table 91.41. Positional Arguments

Value	Summary
workflow_identifier	Workflow id or name. workflow name will be deprecated since Mitaka.
workflow_input	Workflow input
params	Workflow additional parameters

Table 91.42. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Workflow namespace.
-d DESCRIPTION, --description DESCRIPTION	Execution description
-s [SOURCE_EXECUTION_ID]	Workflow execution id which will allow operators to create a new workflow execution based on the previously successful executed workflow. Example: mistral execution-create -s 123e4567-e89b-12d3-a456-426655440000

Table 91.43. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 91.44. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.45. Shell Formatter

Value	Summary
<code>a format a UNIX shell can parse (variable="value")-- prefix PREFIX</code>	Add a prefix to all variable names

Table 91.46. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

91.11. WORKFLOW EXECUTION DELETE

Delete execution.

Usage:

```
openstack workflow execution delete [-h] [--force]
                                execution [execution ...]
```

Table 91.47. Positional Arguments

Value	Summary
<code>execution</code>	Id of execution identifier(s).

Table 91.48. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

Value	Summary
--force	Force the deletion of an execution. might cause a cascade of errors if used for running executions.

91.12. WORKFLOW EXECUTION INPUT SHOW

Show execution input data.

Usage:

```
openstack workflow execution input show [-h] id
```

Table 91.49. Positional Arguments

Value	Summary
id	Execution id

Table 91.50. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

91.13. WORKFLOW EXECUTION LIST

List all executions.

Usage:

```
openstack workflow execution list [-h] [-f {csv,json,table,value,yaml}]
                                [-c COLUMN]
                                [--quote {all,minimal,none,nonnumeric}]
                                [--noindent] [--max-width <integer>]
                                [--fit-width] [--print-empty]
                                [--sort-column SORT_COLUMN]
                                [--marker [MARKER]] [--limit [LIMIT]]
                                [--sort_keys [SORT_KEYS]]
                                [--sort_dirs [SORT_DIRS]]
                                [--filter FILTERS] [--oldest]
                                [--task [TASK]]
```

Table 91.51. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Value	Summary
<code>--marker [MARKER]</code>	The last execution uuid of the previous page, displays list of executions after "marker".
<code>--limit [LIMIT]</code>	Maximum number of entries to return in a single result.
<code>--sort_keys [SORT_KEYS]</code>	Comma-separated list of sort keys to sort results by. Default: <code>created_at</code> . Example: <code>mistral execution-list --sort_keys=id,description</code>
<code>--sort_dirs [SORT_DIRS]</code>	Comma-separated list of sort directions. default: <code>asc</code> . Example: <code>mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc</code>
<code>--filter FILTERS</code>	Filters. can be repeated.
<code>--oldest</code>	Display the executions starting from the oldest entries instead of the newest
<code>--task [TASK]</code>	Parent task execution id associated with workflow execution list.

Table 91.52. Output Formatters

Value	Summary
output formatter options- <code>f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}</code>	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 91.53. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 91.54. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.55. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

91.14. WORKFLOW EXECUTION OUTPUT SHOW

Show execution output data.

Usage:

```
openstack workflow execution output show [-h] id
```

Table 91.56. Positional Arguments

Value	Summary
<code>id</code>	Execution id

Table 91.57. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit

91.15. WORKFLOW EXECUTION SHOW

Show specific execution.

Usage:

```
openstack workflow execution show [-h]
                                [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
```

```

[--prefix PREFIX]
[--max-width <integer>] [--fit-width]
[--print-empty]
execution

```

Table 91.58. Positional Arguments

Value	Summary
execution	Execution identifier

Table 91.59. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 91.60. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 91.61. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.62. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 91.63. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.16. WORKFLOW EXECUTION UPDATE

Update execution.

Usage:

```

openstack workflow execution update [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [-s {RUNNING,PAUSED,SUCCESS,ERROR,CANCELLED}]
    [-e ENV] [-d DESCRIPTION]
    id

```

Table 91.64. Positional Arguments

Value	Summary
id	Execution identifier

Table 91.65. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
-s {RUNNING,PAUSED,SUCCESS,ERROR,CANCELLED} , --state {RUNNING,PAUSED,SUCCESS,ERROR,CANCELLED}	Execution state
-e ENV, --env ENV	Environment variables
-d DESCRIPTION, --description DESCRIPTION	Execution description

Table 91.66. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 91.67. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.68. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 91.69. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.17. WORKFLOW LIST

List all workflows.

Usage:

```
openstack workflow list [-h] [-f {csv,json,table,value,yaml}]
                        [-c COLUMN]
                        [--quote {all,minimal,none,nonnumeric}]
                        [--noindent] [--max-width <integer>]
                        [--fit-width] [--print-empty]
```



```

[--sort-column SORT_COLUMN] [--marker [MARKER]]
[--limit [LIMIT]] [--sort_keys [SORT_KEYS]]
[--sort_dirs [SORT_DIRS]] [--filter FILTERS]

```

Table 91.70. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.

Table 91.71. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 91.72. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 91.73. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.74. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.18. WORKFLOW SHOW

Show specific workflow.

Usage:

```

openstack workflow show [-h] [-f {json,shell,table,value,yaml}]
                        [-c COLUMN] [--noindent] [--prefix PREFIX]
                        [--max-width <integer>] [--fit-width]
                        [--print-empty] [--namespace [NAMESPACE]]
                        workflow

```

Table 91.75. Positional Arguments

Value	Summary
workflow	Workflow id or name.

Table 91.76. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--namespace [NAMESPACE]	Namespace to get the workflow from.

Table 91.77. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 91.78. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.79. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 91.80. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

91.19. WORKFLOW UPDATE

Update workflow.

Usage:

```
openstack workflow update [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN]
                          [--marker [MARKER]] [--limit [LIMIT]]
```

```

[--sort_keys [SORT_KEYS]]
[--sort_dirs [SORT_DIRS]] [--filter FILTERS]
[--id ID] [--namespace [NAMESPACE]]
[--public]
definition

```

Table 91.81. Positional Arguments

Value	Summary
definition	Workflow definition

Table 91.82. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--marker [MARKER]	The last execution uuid of the previous page, displays list of executions after "marker".
--limit [LIMIT]	Maximum number of entries to return in a single result.
--sort_keys [SORT_KEYS]	Comma-separated list of sort keys to sort results by. Default: created_at. Example: mistral execution-list --sort_keys=id,description
--sort_dirs [SORT_DIRS]	Comma-separated list of sort directions. default: asc. Example: mistral execution-list --sort_keys=id,description --sort_dirs=asc,desc
--filter FILTERS	Filters. can be repeated.
--id ID	Workflow id.
--namespace [NAMESPACE]	Namespace of the workflow.
--public	With this flag workflow will be marked as "public".

Table 91.83. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Value	Summary
<code>--sort-column SORT_COLUMN</code>	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 91.84. CSV Formatter

Value	Summary
<code>--quote {all,minimal,none,nonnumeric}</code>	When to include quotes, defaults to nonnumeric

Table 91.85. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 91.86. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

91.20. WORKFLOW VALIDATE

Validate workflow.

Usage:

```
openstack workflow validate [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty]
                             definition
```

Table 91.87. Positional Arguments

Value	Summary
definition	Workflow definition file

Table 91.88. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit

Table 91.89. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 91.90. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 91.91. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 91.92. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

CHAPTER 92. ZONE

This chapter describes the commands under the **zone** command.

92.1. ZONE ABANDON

Abandon a zone

Usage:

```
openstack zone abandon [-h] [--all-projects] [--edit-managed]
                        [--sudo-project-id SUDO_PROJECT_ID]
                        id
```

Table 92.1. Positional Arguments

Value	Summary
id	Zone id

Table 92.2. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

92.2. ZONE AXFR

AXFR a zone

Usage:

```
openstack zone axfr [-h] [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```

Table 92.3. Positional Arguments

Value	Summary
id	Zone id

Table 92.4. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

92.3. ZONE BLACKLIST CREATE

Create new blacklist

Usage:

```

openstack zone blacklist create [-h] [-f {json,shell,table,value,yaml}]
                                [-c COLUMN] [--noindent]
                                [--prefix PREFIX]
                                [--max-width <integer>] [--fit-width]
                                [--print-empty] --pattern PATTERN
                                [--description DESCRIPTION]
                                [--all-projects] [--edit-managed]
                                [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.5. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--pattern PATTERN	Blacklist pattern
--description DESCRIPTION	Description
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.6. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.7. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.8. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.9. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.4. ZONE BLACKLIST DELETE

Delete blacklist

Usage:

```
openstack zone blacklist delete [-h] [--all-projects] [--edit-managed]
                                [--sudo-project-id SUDO_PROJECT_ID]
                                id
```

Table 92.10. Positional Arguments

Value	Summary
id	Blacklist id

Table 92.11. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

92.5. ZONE BLACKLIST LIST

List blacklists

Usage:

```

openstack zone blacklist list [-h] [-f {csv,json,table,value,yaml}]
                             [-c COLUMN]
                             [--quote {all,minimal,none,nonnumeric}]
                             [--noindent] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--sort-column SORT_COLUMN]
                             [--all-projects] [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.12. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.13. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 92.14. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 92.15. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.16. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.6. ZONE BLACKLIST SET

Set blacklist properties

Usage:

```
openstack zone blacklist set [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--pattern PATTERN]
```

```

[--description DESCRIPTION | --no-description]
[--all-projects] [--edit-managed]
[--sudo-project-id SUDO_PROJECT_ID]
id

```

Table 92.17. Positional Arguments

Value	Summary
id	Blacklist id

Table 92.18. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--pattern PATTERN	Blacklist pattern
--description DESCRIPTION	Description
--no-description--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.19. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.20. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.21. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.22. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.7. ZONE BLACKLIST SHOW

Show blacklist details

Usage:

```
openstack zone blacklist show [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent]
                             [--prefix PREFIX] [--max-width <integer>]
                             [--fit-width] [--print-empty]
                             [--all-projects] [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             id
```

Table 92.23. Positional Arguments

Value	Summary
id	Blacklist id

Table 92.24. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false

Value	Summary
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.25. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 92.26. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.27. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.28. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

92.8. ZONE CREATE

Create new zone

Usage:

```

openstack zone create [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--email EMAIL] [--type TYPE]
                    [--ttl TTL] [--description DESCRIPTION]
                    [--masters MASTERS [MASTERS ...]]
                    [--attributes ATTRIBUTES [ATTRIBUTES ...]]
                    [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    name

```

Table 92.29. Positional Arguments

Value	Summary
name	Zone name

Table 92.30. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--email EMAIL	Zone email
--type TYPE	Zone type
--ttl TTL	Time to live (seconds)
--description DESCRIPTION	Description
--masters MASTERS [MASTERS ...]	Zone masters
--attributes ATTRIBUTES [ATTRIBUTES ...]	Zone attributes
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.31. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.32. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.33. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.34. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.9. ZONE DELETE

Delete zone

Usage:

```
openstack zone delete [-h] [-f {json,shell,table,value,yaml}]
                    [-c COLUMN] [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```


Table 92.35. Positional Arguments

Value	Summary
id	Zone id

Table 92.36. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.37. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.38. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.39. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.40. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

92.10. ZONE EXPORT CREATE

Export a Zone

Usage:

```
openstack zone export create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--all-projects]
                             [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_id
```

Table 92.41. Positional Arguments

Value	Summary
<code>zone_id</code>	Zone id

Table 92.42. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.43. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.44. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.45. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.46. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.11. ZONE EXPORT DELETE

Delete a Zone Export

Usage:

```
openstack zone export delete [-h] [--all-projects] [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_export_id
```

Table 92.47. Positional Arguments

Value	Summary
zone_export_id	Zone export id

Table 92.48. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

92.12. ZONE EXPORT LIST

List Zone Exports

Usage:

```
openstack zone export list [-h] [-f {csv,json,table,value,yaml}]
                          [-c COLUMN]
                          [--quote {all,minimal,none,nonnumeric}]
                          [--noindent] [--max-width <integer>]
                          [--fit-width] [--print-empty]
                          [--sort-column SORT_COLUMN] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
```

Table 92.49. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.50. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 92.51. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 92.52. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.53. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.13. ZONE EXPORT SHOW

Show a Zone Export

Usage:

```
openstack zone export show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--all-projects]
```

```

[--edit-managed]
[--sudo-project-id SUDO_PROJECT_ID]
zone_export_id

```

Table 92.54. Positional Arguments

Value	Summary
zone_export_id	Zone export id

Table 92.55. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.56. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.57. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.58. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.59. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

92.14. ZONE EXPORT SHOWFILE

Show the zone file for the Zone Export

Usage:

```
openstack zone export showfile [-h] [-f {json,shell,table,value,yaml}]
                               [-c COLUMN] [--noindent]
                               [--prefix PREFIX]
                               [--max-width <integer>] [--fit-width]
                               [--print-empty] [--all-projects]
                               [--edit-managed]
                               [--sudo-project-id SUDO_PROJECT_ID]
                               zone_export_id
```

Table 92.60. Positional Arguments

Value	Summary
<code>zone_export_id</code>	Zone export id

Table 92.61. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.62. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.63. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.64. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.65. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.15. ZONE IMPORT CREATE

Import a Zone from a file on the filesystem

Usage:

```
openstack zone import create [-h] [-f {json,shell,table,value,yaml}]
                             [-c COLUMN] [--noindent] [--prefix PREFIX]
                             [--max-width <integer>] [--fit-width]
                             [--print-empty] [--all-projects]
                             [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_file_path
```


Table 92.66. Positional Arguments

Value	Summary
zone_file_path	Path to a zone file

Table 92.67. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.68. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.69. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.70. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.71. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

92.16. ZONE IMPORT DELETE

Delete a Zone Import

Usage:

```
openstack zone import delete [-h] [--all-projects] [--edit-managed]
                             [--sudo-project-id SUDO_PROJECT_ID]
                             zone_import_id
```

Table 92.72. Positional Arguments

Value	Summary
<code>zone_import_id</code>	Zone import id

Table 92.73. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

92.17. ZONE IMPORT LIST

List Zone Imports

Usage:

```

openstack zone import list [-h] [-f {csv,json,table,value,yaml}]
                           [-c COLUMN]
                           [--quote {all,minimal,none,nonnumeric}]
                           [--noindent] [--max-width <integer>]
                           [--fit-width] [--print-empty]
                           [--sort-column SORT_COLUMN] [--all-projects]
                           [--edit-managed]
                           [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.74. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.75. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 92.76. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 92.77. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.78. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

92.18. ZONE IMPORT SHOW

Show a Zone Import

Usage:

```
openstack zone import show [-h] [-f {json,shell,table,value,yaml}]
                          [-c COLUMN] [--noindent] [--prefix PREFIX]
                          [--max-width <integer>] [--fit-width]
                          [--print-empty] [--all-projects]
                          [--edit-managed]
                          [--sudo-project-id SUDO_PROJECT_ID]
                          zone_import_id
```

Table 92.79. Positional Arguments

Value	Summary
<code>zone_import_id</code>	Zone import id

Table 92.80. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--all-projects</code>	Show results from all projects. default: false
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.81. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.82. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.83. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.84. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.19. ZONE LIST

List zones

Usage:

```
openstack zone list [-h] [-f {csv,json,table,value,yaml}] [-c COLUMN]
                   [--quote {all,minimal,none,nonnumeric}]
                   [--noindent] [--max-width <integer>] [--fit-width]
                   [--print-empty] [--sort-column SORT_COLUMN]
                   [--name NAME] [--email EMAIL] [--type TYPE]
```

```

[--ttl TTL] [--description DESCRIPTION]
[--status STATUS] [--all-projects] [--edit-managed]
[--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.85. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--name NAME	Zone name
--email EMAIL	Zone email
--type TYPE	Zone type
--ttl TTL	Time to live (seconds)
--description DESCRIPTION	Description
--status STATUS	Zone status
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.86. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 92.87. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 92.88. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.89. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.20. ZONE SET

Set zone properties

Usage:

```
openstack zone set [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                  [--noindent] [--prefix PREFIX]
                  [--max-width <integer>] [--fit-width]
                  [--print-empty] [--email EMAIL] [--ttl TTL]
                  [--description DESCRIPTION | --no-description]
                  [--masters MASTERS [MASTERS ...]] [--all-projects]
                  [--edit-managed] [--sudo-project-id SUDO_PROJECT_ID]
                  id
```

Table 92.90. Positional Arguments

Value	Summary
id	Zone id

Table 92.91. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--email EMAIL	Zone email

Value	Summary
--ttl TTL	Time to live (seconds)
--description DESCRIPTION	Description
--no-description--masters MASTERS [MASTERS ...]	Zone masters
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.92. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.93. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.94. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.95. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.21. ZONE SHOW

Show zone details

Usage:

```
openstack zone show [-h] [-f {json,shell,table,value,yaml}] [-c COLUMN]
                    [--noindent] [--prefix PREFIX]
                    [--max-width <integer>] [--fit-width]
                    [--print-empty] [--all-projects] [--edit-managed]
                    [--sudo-project-id SUDO_PROJECT_ID]
                    id
```

Table 92.96. Positional Arguments

Value	Summary
id	Zone id

Table 92.97. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.98. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table

Value	Summary
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.99. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.100. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.101. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.22. ZONE TRANSFER ACCEPT LIST

List Zone Transfer Accepts

Usage:

```

openstack zone transfer accept list [-h]
                                   [-f {csv,json,table,value,yaml}]
                                   [-c COLUMN]
                                   [--quote {all,minimal,none,nonnumeric}]
                                   [--noindent]
                                   [--max-width <integer>]
                                   [--fit-width] [--print-empty]
                                   [--sort-column SORT_COLUMN]
                                   [--all-projects] [--edit-managed]
                                   [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.102. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.103. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 92.104. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 92.105. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.106. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

92.23. ZONE TRANSFER ACCEPT REQUEST

Accept a Zone Transfer Request

Usage:

```

openstack zone transfer accept request [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     --transfer-id TRANSFER_ID --key
                                     KEY [--all-projects]
                                     [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]

```

Table 92.107. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--transfer-id TRANSFER_ID</code>	Transfer id
<code>--key KEY</code>	Transfer key
<code>--all-projects</code>	Show results from all projects. default: false
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.108. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.109. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.110. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.111. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.24. ZONE TRANSFER ACCEPT SHOW

Show Zone Transfer Accept

Usage:

```
openstack zone transfer accept show [-h]
                                   [-f {json,shell,table,value,yaml}]
                                   [-c COLUMN] [--noindent]
                                   [--prefix PREFIX]
```

```

[--max-width <integer>]
[--fit-width] [--print-empty]
[--all-projects] [--edit-managed]
[--sudo-project-id SUDO_PROJECT_ID]
id

```

Table 92.112. Positional Arguments

Value	Summary
id	Zone transfer accept id

Table 92.113. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.114. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.115. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.116. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.117. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

92.25. ZONE TRANSFER REQUEST CREATE

Create new zone transfer request

Usage:

```

openstack zone transfer request create [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--target-project-id TARGET_PROJECT_ID]
                                     [--description DESCRIPTION]
                                     [--all-projects]
                                     [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]
                                     zone_id

```

Table 92.118. Positional Arguments

Value	Summary
<code>zone_id</code>	Zone id to transfer.

Table 92.119. Optional Arguments

Value	Summary
<code>-h, --help</code>	Show this help message and exit
<code>--target-project-id TARGET_PROJECT_ID</code>	Target project id to transfer to.
<code>--description DESCRIPTION</code>	Description

Value	Summary
<code>--all-projects</code>	Show results from all projects. default: false
<code>--edit-managed</code>	Edit resources marked as managed. default: false
<code>--sudo-project-id SUDO_PROJECT_ID</code>	Project id to impersonate for this command. default: None

Table 92.120. Output Formatters

Value	Summary
output formatter options- <code>f</code> {json,shell,table,value,yaml}, <code>--format</code> {json,shell,table,value,yaml}	The output format, defaults to table
<code>-c COLUMN, --column COLUMN</code>	Specify the column(s) to include, can be repeated

Table 92.121. JSON Formatter

Value	Summary
<code>--noindent</code>	Whether to disable indenting the json

Table 92.122. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.123. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.

92.26. ZONE TRANSFER REQUEST DELETE

Delete a Zone Transfer Request

Usage:

```
openstack zone transfer request delete [-h] [--all-projects]
                                     [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]
                                     id
```

Table 92.124. Positional Arguments

Value	Summary
id	Zone transfer request id

Table 92.125. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

92.27. ZONE TRANSFER REQUEST LIST

List Zone Transfer Requests

Usage:

```
openstack zone transfer request list [-h]
                                     [-f {csv,json,table,value,yaml}]
                                     [-c COLUMN]
                                     [--quote {all,minimal,none,nonnumeric}]
                                     [--noindent]
                                     [--max-width <integer>]
                                     [--fit-width] [--print-empty]
                                     [--sort-column SORT_COLUMN]
                                     [--all-projects] [--edit-managed]
                                     [--sudo-project-id SUDO_PROJECT_ID]
```

Table 92.126. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.127. Output Formatters

Value	Summary
output formatter options-f {csv,json,table,value,yaml}, --format {csv,json,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated
--sort-column SORT_COLUMN	Specify the column(s) to sort the data (columns specified first have a priority, non-existing columns are ignored), can be repeated

Table 92.128. CSV Formatter

Value	Summary
--quote {all,minimal,none,nonnumeric}	When to include quotes, defaults to nonnumeric

Table 92.129. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.130. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.

Value	Summary
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.28. ZONE TRANSFER REQUEST SET

Set a Zone Transfer Request

Usage:

```
openstack zone transfer request set [-h]
    [-f {json,shell,table,value,yaml}]
    [-c COLUMN] [--noindent]
    [--prefix PREFIX]
    [--max-width <integer>]
    [--fit-width] [--print-empty]
    [--description DESCRIPTION | --no-description]
    [--all-projects] [--edit-managed]
    [--sudo-project-id SUDO_PROJECT_ID]
    id
```

Table 92.131. Positional Arguments

Value	Summary
id	Zone transfer request id

Table 92.132. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--description DESCRIPTION	Description
--no-description--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.133. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.134. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.135. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.136. Table Formatter

Value	Summary
--max-width <integer>	Maximum display width, <1 to disable. you can also use the CLIFF_MAX_TERM_WIDTH environment variable, but the parameter takes precedence.
--fit-width	Fit the table to the display width. implied if --max-width greater than 0. Set the environment variable CLIFF_FIT_WIDTH=1 to always enable
--print-empty	Print empty table if there is no data to show.

92.29. ZONE TRANSFER REQUEST SHOW

Show Zone Transfer Request Details

Usage:

```
openstack zone transfer request show [-h]
                                     [-f {json,shell,table,value,yaml}]
                                     [-c COLUMN] [--noindent]
                                     [--prefix PREFIX]
                                     [--max-width <integer>]
```

```

[--fit-width] [--print-empty]
[--all-projects] [--edit-managed]
[--sudo-project-id SUDO_PROJECT_ID]
id

```

Table 92.137. Positional Arguments

Value	Summary
id	Zone transfer request id

Table 92.138. Optional Arguments

Value	Summary
-h, --help	Show this help message and exit
--all-projects	Show results from all projects. default: false
--edit-managed	Edit resources marked as managed. default: false
--sudo-project-id SUDO_PROJECT_ID	Project id to impersonate for this command. default: None

Table 92.139. Output Formatters

Value	Summary
output formatter options-f {json,shell,table,value,yaml}, --format {json,shell,table,value,yaml}	The output format, defaults to table
-c COLUMN, --column COLUMN	Specify the column(s) to include, can be repeated

Table 92.140. JSON Formatter

Value	Summary
--noindent	Whether to disable indenting the json

Table 92.141. Shell Formatter

Value	Summary
a format a UNIX shell can parse (variable="value")-- prefix PREFIX	Add a prefix to all variable names

Table 92.142. Table Formatter

Value	Summary
<code>--max-width <integer></code>	Maximum display width, <1 to disable. you can also use the <code>CLIFF_MAX_TERM_WIDTH</code> environment variable, but the parameter takes precedence.
<code>--fit-width</code>	Fit the table to the display width. implied if <code>--max-width</code> greater than 0. Set the environment variable <code>CLIFF_FIT_WIDTH=1</code> to always enable
<code>--print-empty</code>	Print empty table if there is no data to show.