



# Red Hat OpenShift Container Platform

How to get the most out of your Red Hat support

Customer Experience and Engagement

A low-angle, upward-looking photograph of modern skyscrapers. The image is heavily stylized with a teal/cyan color overlay. The perspective creates strong diagonal lines and a sense of height and scale. The sky is visible at the top, appearing overcast.

Recommended practices when  
engaging with Red Hat support:

OpenShift Container Platform

# ISSUE RESOLUTION

What to provide and getting comfortable with OpenShift



OpenShift Container Platform  
troubleshooting and how-to:

<http://red.ht/2wZ7QBJ>

# ISSUE RESOLUTION STEPS



## What to provide | General

### SOSReports:

- yum install sos
- sosreport -k docker.all=on -k docker.logs=on
- ... on both masters and nodes

### Master, Node & Pod Logs:

- journalctl -u atomic-openshift-master-controllers \  
 > openshift-master-controllers-`hostname`.log
- journalctl -u atomic-openshift-master-api >  
 openshift-master-api-`hostname`.log
- journalctl -u atomic-openshift-node > openshift-node-`hostname`.log
- oc get pods && oc logs <pod\_name>

### Config Files:

- /etc/origin/master/master-config.yml
- /etc/sysconfig/atomic-openshift-master-controllers
- /etc/sysconfig/atomic-openshift-master-api
- /etc/sysconfig/atomic-openshift-node
- /etc/sysconfig/docker

# ISSUE RESOLUTION STEPS

## What to provide | General



### Log Levels:

- master, node log levels in /etc/sysconfig/atomic-openshift-master, -node  
OPTIONS='--loglevel=XX'
- Docker log level in /etc/sysconfig/docker  
OPTIONS='--insecure-registry=172.30.0.0/16 --selinux-enabled  
--log-level=debug'
- CLI  
oc whoami --loglevel=8

### Environmental:

- oc get node,hostsubnet
- oc get all,events,status -n default
- oc get all,events,status -n <project>
- oadm manage-node <node1> <node2> --list-pods

### Diagnostics:

- oadm diagnostics --diaglevel=0 # debug

# ISSUE RESOLUTION STEPS

## What to provide | Installer Failures



### Installer:

- `ansible all -m ping -vvvv`
- `ansible-playbook ~/openshift-ansible/playbooks/byo/openshift_facts.yml > facts.log`
- `ansible-playbook ~/openshift-ansible/playbooks/byo/config.yml -vvv | tee install.log`
- `ansible-playbook ~/openshift-ansible/playbooks/adhoc/uninstall.yml | tee uninstall.log`
- `ansible-playbook ~/openshift-ansible/playbooks/byo/openshift-node/scaleup.yml | tee scaleup.log`

### Installer Config:

- Copy of: `/etc/ansible/hosts`

### Versions:

- Ansible Version
- Openshift Playbook Version
- Openshift Version

### Other

- Any other unusual environment settings

# ISSUE RESOLUTION STEPS

## What to provide | Networking



### SDN:

- `oc get hosts subnets`
- `sosreport # unpack: tar Jxvf sosreport-XXX-XXX.xz`
  - a. `sos_commands/networking/ip_address`
  - b. `sos_commands/networking/ip_route_show_table_all`
  - c. `sos_commands/networking/iptables_-t_filter_-nvL`
  - d. `sos_commands/networking/iptables_-t_nat_-nvL`
  - e. `sos_commands/logs/journalctl*`
- `ovs-ofctl -O OpenFlow13 show br0 > ovs-show.txt`
- `ovs-ofctl -O OpenFlow13 dump-flows br0 > ovs-dump-flows.txt`
- `ovs-ofctl -O OpenFlow13 dump-ports-desc br0 > ovs-ports.txt`

### SDN Debug:

- `curl -O http://bit.ly/2y3APTh`
  - `./debug.sh`

# ISSUE RESOLUTION STEPS

## What to provide | Registry



### Health:

- `oc get service |grep docker-registry`
- `curl -v <REGISTRY_IP>:5000/healthz`
- `oc get pods -n default -o wide -l docker-registry`

### Storage:

- `oc get pods -n default`
- `oc rsh <REGISTRY POD>`

### Data:

- `oc status -n default > status.out`
- `oc get nodes,hostsubnet,all -n default > default.out`
- `oc logs <docker-registry-pod> -n default > registry_logs.out`
- `oc describe all -l docker-registry -n default > registry_all.out`
- `oc get dc docker-registry -o yaml -n default > registry_dc.out`



# ISSUE RESOLUTION STEPS

## What to provide | Routing



### Health:

- `$ oc logs dc/router -n default # basic health`  
`$ oc get dc/router -o yaml -n default`  
`$ oc get route <NAME_OF_ROUTE> -n <PROJECT>`  
`$ oc get endpoints --all-namespaces`

### New in OpenShift 3.5+

- `oc env dc/router GOTRACEBACK=2`
- `oc env dc/router OPENSIFT_PROFILE=web`
- `# curl http://127.0.0.1:6061/debug/pprof/goroutine?debug=1 >`  
`goroutine_debug_1`  
`# curl http://127.0.0.1:6061/debug/pprof/goroutine?debug=2 >`  
`goroutine_debug_2`  
`# curl http://127.0.0.1:6061/debug/pprof/block?debug=1 > block_debug_1`

# ISSUE RESOLUTION STEPS

## What to provide | Logging & Metrics

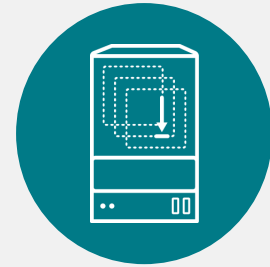


### Logs and Data:

- `oc logs heapster-<HASH> & heapster.logs`
- `oc logs hawkular-metrics-<HASH> & hawkular-metrics.logs`
- `oc logs hawkular-cassandra-<HASH> & hawkular-cassandra.logs`
- `oc describe pods heapster-<HASH> & heapster.events`
- `oc describe pods hawkular-metrics-<HASH> & hawkular-metrics.events`
- `oc describe pods hawkular-cassandra-<HASH> & hawkular-cassandra.events`
- `oc logs logging-fluentd-<HASH> & logging-fluentd.logs`
- `oc logs logging-es-e0rihgow-<HASH> & logging-es.logs`
- `oc logs logging-kibana-<HASH> & logging-kibana.logs`
- `oc logs logging-curator-<HASH> & logging-curator.logs`
- `oc describe pods logging-fluentd-<HASH> & fluentd.events`
- `oc describe pods logging-es-e0rihgow-<HASH> & logging-es.events`
- `oc describe pods logging-kibana-<HASH> & logging-kibana.events`
- `oc describe pods logging-curator-<HASH> & logging-curator.events`

# ISSUE RESOLUTION STEPS

## What to provide | Builds & Deployment



### Builds:

- `oc logs bc/<build_name>`
- Increase log levels of the build to gather more information

```
○ {
  "sourceStrategy": {
    ...
    "env": [
      {
        "name": "BUILD_LOGLEVEL",
        "value": "5"
      }
    ]
  }
}
```

### Deployments:

- `oc describe dc <name> [--namespace <project>]`
- `oc logs dc/<name> [--namespace <project>]`



# THANK YOU

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