Release details for Red Hat OpenStack Platform 17.0 Beta

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Abstract

This document outlines the major features, enhancements, and known issues in this release of Red Hat OpenStack Platform.
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MAKING OPEN SOURCE MORE INCLUSIVE

Red Hat is committed to replacing problematic language in our code, documentation, and web properties. We are beginning with these four terms: master, slave, blacklist, and whitelist. Because of the enormity of this endeavor, these changes will be implemented gradually over several upcoming releases. For more details, see our CTO Chris Wright’s message.
CHAPTER 1. INTRODUCTION

1.1. ABOUT THIS RELEASE

This beta release of Red Hat OpenStack Platform is based on the OpenStack "Wallaby" release. It includes additional features, known issues, and resolved issues specific to Red Hat OpenStack Platform.

Only changes specific to Red Hat OpenStack Platform are included in this document. The release notes for the OpenStack "Wallaby" release itself are available at the following location: https://releases.openstack.org/wallaby/index.html.

Red Hat OpenStack Platform uses components from other Red Hat products. For specific information pertaining to the support of these components, see https://access.redhat.com/site/support/policy/updates/openstack/platform/.

To evaluate Red Hat OpenStack Platform, sign up at http://www.redhat.com/openstack/.

NOTE

The Red Hat Enterprise Linux High Availability Add-On is available for Red Hat OpenStack Platform use cases. For more details about the add-on, see http://www.redhat.com/products/enterprise-linux-add-ons/high-availability/. For details about the package versions to use in combination with Red Hat OpenStack Platform, see https://access.redhat.com/site/solutions/509783.

1.2. REQUIREMENTS

This beta version of Red Hat OpenStack Platform runs on Red Hat Enterprise Linux version 9.

The Red Hat OpenStack Platform dashboard is a web-based interface that allows you to manage OpenStack resources and services.

The dashboard for this release runs on the latest stable versions of the following web browsers:

- Chrome
- Mozilla Firefox
- Mozilla Firefox ESR
- Internet Explorer 11 and later (with Compatibility Mode disabled)

NOTE

Because Internet Explorer 11 is no longer maintained, expect a degradation of functionality when displaying the dashboard.

1.3. DEPLOYMENT LIMITS

For a list of deployment limits for Red Hat OpenStack Platform, see Deployment Limits for Red Hat OpenStack Platform.

1.4. DATABASE SIZE MANAGEMENT
For recommended practices on maintaining the size of the MariaDB databases in your Red Hat OpenStack Platform environment, see Database Size Management for Red Hat Enterprise Linux OpenStack Platform.

1.5. CERTIFIED DRIVERS AND PLUG-INS

For a list of the certified drivers and plug-ins in Red Hat OpenStack Platform, see Component, Plug-In, and Driver Support in Red Hat OpenStack Platform.

1.6. CERTIFIED GUEST OPERATING SYSTEMS

For a list of the certified guest operating systems in Red Hat OpenStack Platform, see Certified Guest Operating Systems in Red Hat OpenStack Platform and Red Hat Enterprise Virtualization.

1.7. PRODUCT CERTIFICATION CATALOG

For a list of the Red Hat Official Product Certification Catalog, see Product Certification Catalog.

1.8. BARE METAL PROVISIONING OPERATING SYSTEMS

For a list of the guest operating systems that can be installed on bare metal nodes in Red Hat OpenStack Platform through Bare Metal Provisioning (ironic), see Supported Operating Systems Deployable With Bare Metal Provisioning (ironic).

1.9. HYPERVISOR

This beta release of the Red Hat OpenStack Platform uses only the libvirt driver (using KVM as the hypervisor on Compute nodes).

This beta release of the Red Hat OpenStack Platform runs with Bare Metal Provisioning.

1.10. CONTENT DELIVERY NETWORK (CDN) REPOSITORIES

This section describes the repositories required to deploy Red Hat OpenStack Platform 17.0-beta.

You can install Red Hat OpenStack Platform 17.0-beta through the Content Delivery Network (CDN) using subscription-manager.

For more information, see Planning your undercloud.

WARNING

Some packages in the Red Hat OpenStack Platform software repositories conflict with packages provided by the Extra Packages for Enterprise Linux (EPEL) software repositories. The use of Red Hat OpenStack Platform on systems with the EPEL software repositories enabled is unsupported.
1.10.1. Undercloud repositories

Red Hat OpenStack Platform 17.0-beta runs on Red Hat Enterprise Linux 9.0. As a result, you must lock the content from these repositories to the respective Red Hat Enterprise Linux version.

**NOTE**

If you synchronize repositories with Red Hat Satellite, you can enable specific versions of the Red Hat Enterprise Linux repositories. However, the repository remains the same despite the version you choose. For example, you can enable the 9.0 version of the BaseOS repository, but the repository name is still `rhel-9-for-x86_64-baseos-eus-rpms` despite the specific version you choose.

**WARNING**

Any repositories outside the ones specified here are not supported. Unless recommended, do not enable any other products or repositories outside the ones listed in the following tables or else you might encounter package dependency issues. Do not enable Extra Packages for Enterprise Linux (EPEL).

### Core repositories

The following table lists core repositories for installing the undercloud.

<table>
<thead>
<tr>
<th>Name</th>
<th>Repository</th>
<th>Description of requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - BaseOS (RPMs) Extended Update Support (EUS)</td>
<td><code>rhel-9-for-x86_64-baseos-eus-rpms</code></td>
<td>Base operating system repository for x86_64 systems.</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - AppStream (RPMs)</td>
<td><code>rhel-9-for-x86_64-appstream-eus-rpms</code></td>
<td>Contains Red Hat OpenStack Platform dependencies.</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - High Availability (RPMs) Extended Update Support (EUS)</td>
<td><code>rhel-9-for-x86_64-highavailability-eus-rpms</code></td>
<td>High availability tools for Red Hat Enterprise Linux. Used for Controller node high availability.</td>
</tr>
<tr>
<td>Red Hat OpenStack Platform Beta for RHEL 9 (RPMs)</td>
<td><code>openstack-beta-for-rhel-9-x86_64-rpms</code></td>
<td>Beta Red Hat OpenStack Platform repository, which contains packages for Red Hat OpenStack Platform director.</td>
</tr>
<tr>
<td>Red Hat Fast Datapath for RHEL 9 (RPMS)</td>
<td><code>fast-datapath-for-rhel-9-x86_64-rpms</code></td>
<td>Provides Open vSwitch (OVS) packages for OpenStack Platform.</td>
</tr>
</tbody>
</table>

1.10.2. Overcloud repositories
Red Hat OpenStack Platform 17.0-beta runs on Red Hat Enterprise Linux 9.0. As a result, you must lock
the content from these repositories to the respective Red Hat Enterprise Linux version.

**NOTE**

If you synchronize repositories with Red Hat Satellite, you can enable specific versions of
the Red Hat Enterprise Linux repositories. However, the repository remains the same
despite the version you choose. For example, you can enable the 9.0 version of the
BaseOS repository, but the repository name is still `rhel-9-for-x86_64-baseos-eus-rpms`
despite the specific version you choose.

**WARNING**

Any repositories outside the ones specified here are not supported. Unless
recommended, do not enable any other products or repositories outside the ones
listed in the following tables or else you might encounter package dependency
issues. Do not enable Extra Packages for Enterprise Linux (EPEL).

### Controller node repositories

The following table lists core repositories for Controller nodes in the overcloud.

<table>
<thead>
<tr>
<th>Name</th>
<th>Repository</th>
<th>Description of requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - BaseOS (RPMs) Extended Update Support (EUS)</td>
<td><code>rhel-9-for-x86_64-baseos-eus-rpms</code></td>
<td>Base operating system repository for x86_64 systems.</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - AppStream (RPMs)</td>
<td><code>rhel-9-for-x86_64-appstream-eus-rpms</code></td>
<td>Contains Red Hat OpenStack Platform dependencies.</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - High Availability (RPMs) Extended Update Support (EUS)</td>
<td><code>rhel-9-for-x86_64-highavailability-eus-rpms</code></td>
<td>High availability tools for Red Hat Enterprise Linux.</td>
</tr>
<tr>
<td>Red Hat OpenStack Platform Beta for RHEL 9 x86_64 (RPMs)</td>
<td><code>openstack-beta-for-rhel-9-x86_64-rpms</code></td>
<td>Beta Red Hat OpenStack Platform repository.</td>
</tr>
<tr>
<td>Red Hat Fast Datapath for RHEL 9 (RPMS)</td>
<td><code>fast-datapath-for-rhel-9-x86_64-rpms</code></td>
<td>Provides Open vSwitch (OVS) packages for OpenStack Platform.</td>
</tr>
<tr>
<td>Red Hat Ceph Storage Tools 5 for RHEL 9 x86_64 (RPMs)</td>
<td><code>rhceph-5-tools-for-rhel-9-x86_64-rpms</code></td>
<td>Tools for Red Hat Ceph Storage 5 for Red Hat Enterprise Linux 9.</td>
</tr>
</tbody>
</table>

### Compute node repositories

The following table lists core repositories for Compute nodes in the overcloud.
### Real Time Compute repositories

The following table lists repositories for Real Time Compute (RTC) functionality.

<table>
<thead>
<tr>
<th>Name</th>
<th>Repository</th>
<th>Description of requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - Real Time (RPMs)</td>
<td>rhel-9-for-x86_64-rt-rpms</td>
<td>Repository for Real Time KVM (RT-KVM). Contains packages to enable the real time kernel. Enable this repository for all Compute nodes targeted for RT-KVM. NOTE: You need a separate subscription to a <a href="#">Red Hat OpenStack Platform for Real Time</a> SKU to access this repository.</td>
</tr>
<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - Real Time for NFV (RPMs)</td>
<td>rhel-9-for-x86_64-nfv-rpms</td>
<td>Repository for Real Time KVM (RT-KVM) for NFV. Contains packages to enable the real time kernel. Enable this repository for all NFV Compute nodes targeted for RT-KVM. NOTE: You need a separate subscription to a <a href="#">Red Hat OpenStack Platform for Real Time</a> SKU to access this repository.</td>
</tr>
</tbody>
</table>
Ceph Storage node repositories

The following table lists Ceph Storage related repositories for the overcloud.

<table>
<thead>
<tr>
<th>Name</th>
<th>Repository</th>
<th>Description of requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - BaseOS (RPMs)</td>
<td>rhel-9-for-x86_64-baseos-rpms</td>
<td>Base operating system repository for x86_64 systems.</td>
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<tr>
<td>Red Hat Enterprise Linux 9 for x86_64 - AppStream (RPMs)</td>
<td>rhel-9-for-x86_64-appstream-rpms</td>
<td>Contains Red Hat OpenStack Platform dependencies.</td>
</tr>
<tr>
<td>Red Hat OpenStack Platform Beta for RHEL 9 x86_64 (RPMs)</td>
<td>openstack-beta-for-rhel-9-x86_64-rpms</td>
<td>Red Hat OpenStack Platform Beta repository, which contains packages for Red Hat OpenStack Platform director as well as packages to help director configure Red Hat Ceph Storage nodes.</td>
</tr>
<tr>
<td>Red Hat Ceph Storage Tools 5 for RHEL 9 x86_64 (RPMs)</td>
<td>rhceph-4-tools-for-rhel-9-x86_64-rpms</td>
<td>Tools for Red Hat Ceph Storage 5 for Red Hat Enterprise Linux 9.</td>
</tr>
<tr>
<td>Red Hat Fast Datapath for RHEL 9 (RPMS)</td>
<td>fast-datapath-for-rhel-9-x86_64-rpms</td>
<td>Provides Open vSwitch (OVS) packages for OpenStack Platform. If you are using OVS on Ceph Storage nodes, add this repository to the network interface configuration (NIC) templates.</td>
</tr>
</tbody>
</table>

1.11. PRODUCT SUPPORT

Available resources include:

Customer Portal

The Red Hat Customer Portal offers a wide range of resources to help guide you through planning, deploying, and maintaining your Red Hat OpenStack Platform deployment. Facilities available through the Customer Portal include:

- Product documentation
- Knowledge base articles and solutions
- Technical briefs
- Support case management

Access the Customer Portal at https://access.redhat.com/.

Mailing Lists

Red Hat provides these public mailing lists that are relevant to Red Hat OpenStack Platform users:
The rhsa-announce mailing list provides notification of the release of security fixes for all Red Hat products, including Red Hat OpenStack Platform.


Beta and Release Candidate Release Support Limits

Updates to the beta and release candidate content on the Content Delivery Network (CDN) will be determined at the discretion of the OpenStack product team. There are no plans nor guarantees for updates to the beta code on CDN. Also:

- The beta and release candidate code should not be used with production data or on production systems.
- No guarantee of support is provided, but feedback and bug reports are welcome as are discussions with your account representative, partner contact, TAM, and so on.
- Upgrades to or from a beta or release candidate are not supported nor recommended.
- No errata to the beta or release candidate will be provided.

1.12. UNSUPPORTED FEATURES

Containers are not available for the following packages, therefore they are not supported in RHOSP:

- openstack-nova-serialproxy
- openstack-nova-spicehtml5proxy

If you require support for any of these features, please contact the Red Hat Customer Experience and Engagement team to obtain a support exception.
CHAPTER 2. TOP NEW FEATURES

This section provides an overview of the top new features in this release of Red Hat OpenStack Platform.

2.1. BARE METAL SERVICE

This section outlines the top new features for the Bare Metal (ironic) service.

Provision hardware before deploying the overcloud

In Red Hat OpenStack Platform 17.0, you must provision the bare metal nodes and the physical networks resources for the overcloud before deploying the overcloud. The `openstack overcloud deploy` command no longer provisions the hardware. For more information, see Provisioning and deploying your overcloud.

New network definition file format

In Red Hat OpenStack Platform 17.0, you configure your network definition files by using ansible jinja2 templates instead of heat templates. For more information, see Configuring overcloud networking.

Whole disk images are the default overcloud image

The default `overcloud-full` flat partition images have been updated to `overcloud-hardened-uefi-full` whole disk images. The whole disk image consists of a single compressed qcow2 image containing the following elements:

- A partition layout containing UEFI boot, legacy boot, and a root partition.
- The root partition contains a single lvm group with a number of logical volumes of different sizes which are mounted at `/`, `/tmp`, `/var`, `/var/log`, etc.

When a whole-disk image is deployed, ironic-python-agent copies the whole image to the disk without making any bootloader or partition changes.

UEFI Boot by default

Bare metal nodes are now deployed with the UEFI boot mode by default, because vendors now ship hardware with no Legacy BIOS boot.

2.2. CEPH STORAGE

This section outlines the top new features for Ceph Storage.

Greater security for Ceph client manila service permissions

The manila CephFS drivers (Native CephFS and CephFS through NFS) now interact with Ceph clusters through the Ceph Manager `Volumes` interface. The Ceph client user configured for manila no longer needs to be as permissive as it was in the past. This feature makes Ceph client user permissions for the manila service more secure.

Ceph Object Gateway (RGW) replaces Object Storage service (swift)

When you use director to deploy Ceph, director automatically enables Ceph Object Gateway (RGW) object storage, which is a direct replacement for the Object Storage service (swift). All other services that normally use the Object Storage service can start using RGW instead without additional configuration. The Object Storage service remains available as an object storage option for upgraded clusters.
2.3. COMPUTE

This section outlines the top new features for the Compute service.

Support for attaching and detaching SR-IOV devices to an instance

Cloud users can create a port that has an SR-IOV vNIC, and attach the port to an instance when there is a free SR-IOV device on the host on the appropriate physical network, and the instance has a free PCIe slot. For more information, see Attaching a port to an instance.

Support for creating an instance with NUMA affinity on the port

Cloud users can create a port that has a NUMA affinity policy, and attach the port to an instance. For more information, see Creating an instance with NUMA affinity on the port.

2.4. NETWORKING

This section outlines the top new features for the Networking service.

Active/Active clustered database service model provides better OVS database read performance and more robust fault tolerance

Starting in RHOSP 17.0, RHOSP ML2/OVN deployments use a clustered database service model that applies the Raft consensus algorithm to enhance performance of OVS database protocol traffic and provide faster, more reliable failover handling. The clustered database service model replaces the pacemaker-based, active/backup model.

A clustered database operates on a cluster of at least three database servers on different hosts. Servers use the Raft consensus algorithm to synchronize writes and share network traffic continuously across the cluster. The cluster elects one server as the leader. All servers in the cluster can handle database read operations, which mitigates potential bottlenecks on the control plane. Write operations are handled by the cluster leader.

If a server fails, a new cluster leader is elected and the traffic is redistributed among the remaining operational servers. The clustered database service model handles failovers more efficiently than the pacemaker-based model did. This mitigates related downtime and complications that can occur with longer failover times.

The leader election process requires a majority, so the fault tolerance capacity is limited by the highest odd number in the cluster. For instance, a three-server cluster continues to operate if one server fails. A five-server cluster tolerates up to two failures. Increasing the number of servers to an even number does not increase fault tolerance. For instance, a four-server cluster cannot tolerate more failures than a three-server cluster.

Most RHOSP deployments use three servers.

Clusters larger than five servers also work, with every two added servers allowing the cluster to tolerate one more failure, but write performance decreases.

The clustered database model is the default in RHOSP 17.0 deployments. You do not need to perform any configuration steps.

Designate DNSaaS

In Red Hat OpenStack Platform (RHOSP) 17.0, designate is now supported. Designate is an official OpenStack project that provides DNS-as-a-Service (DNSaaS) implementation and enables you to manage DNS records and zones in the cloud. The RHOSP DNS service provides a REST API, and is integrated with the RHOSP Identity service (keystone) for user management. Using RHOSP director you can deploy BIND instances to contain DNS records, or you can integrate the DNS service into an
existing BIND infrastructure. In addition, director can configure DNS service integration with the RHOSP Networking service (neutron) to automatically create records for virtual machine instances, network ports, and floating IPs. For more information, see Using Designate for DNS-as-a-Service.

2.5. DOCUMENTATION

This section outlines the major documentation updates new with this version of Red Hat Openstack Platform (RHOSP).

New chapter: Documentation Changes

The Documentation Changes chapter describes substantial changes made to the documentation set between releases. Substantial changes include new features or enhancements and fixes to configuration or procedures that might affect a customer environment or operation.

Not published: Framework for Upgrades Guide

In RHOSP 17.0, upgrades from previous versions are not supported. As a result, the Framework for Upgrades guide will not be published in the RHOSP 17.0 life cycle. In RHOSP 17.1, upgrades will be supported and the Framework for Upgrades Guide will be published. Updates from 17.0.0 to 17.0.z are supported in the RHOSP 17.0 life cycle. For more information, see Keeping Red Hat OpenStack Platform Updated

Not published: Migrating the Networking Service to the ML2/OVN Mechanism Driver

Because upgrades are not supported from previous RHOSP versions to RHOSP 17.0, all RHOSP 17.0 deployments use the default ML2/OVN mechanism driver. Therefore there is no reason to migrate from ML2/OVS to ML2/OVN in RHOSP 17.0. Migration from ML2/OVS to ML2/OVN will be supported in RHOSP 17.1.

Not published: Scaling Deployments with Compute Cells

The Compute cells feature is not working in RHOSP 17.0. Therefore, the Scaling Deployments with Compute Cells guide has been removed until the underlying issues are fixed.

Removed: Advanced Overcloud Customization Guide

The contents of the Advanced Overcloud Customization guide have been distributed to several other guides. For instance, several chapters on networking were moved from the previous Advanced Overcloud Customization guide to the Director Installation and Usage guide and the chapter “Configuring the image import method and shared staging area” was moved to the Creating and Managing Images guide.

Removed: Federate with Identity Service guide

The Federate with Identity Service guide has been removed. Its contents are consolidated in a Red Hat knowledgebase article that is currently under development.

Removed: Deploy Fernet on the Overcloud

The Deploy Fernet on the Overcloud guide has been removed. For information about working with Fernet keys, see the Security and Hardening guide.

Product Documentation page reorganized

The Product Documentation landing page, also known as splash page, has been reorganized. Sections have been renamed, removed, or replaced and the list of titles represents the latest set of titles.
CHAPTER 3. RELEASE INFORMATION

These release notes highlight technology preview items, recommended practices, known issues, and deprecated functionality that you should consider when you deploy this release of Red Hat OpenStack Platform.

Notes for updates released during the support lifecycle of this Red Hat OpenStack Platform release appear in the advisory text associated with each update.

3.1. RED HAT OPENSTACK PLATFORM 17.0 BETA

These release notes highlight technology preview items, recommended practices, known issues, and deprecated functionality to be taken into consideration when deploying this release of Red Hat OpenStack Platform.

3.1.1. Bug Fix

These bugs were fixed in this release of Red Hat OpenStack Platform:

BZ#1883326
Before this update, an issue existed with PowerFlex storage-assisted volume migration when volume migration was performed without conversion of volume type in cases where is should have been converted to thin from thick provisioned. With this update, this issue is fixed.

BZ#1944586
This update fixes a bug that incorrectly redirected registered non-stdout callback output from various Ansible processes to the validations logging directory. Output of other processes is no longer stored in validations logging directory. VF callbacks no longer receive information about plays, unless requested.

BZ#2101937
With this fix, traffic is distributed on VLAN provider networks in ML2/OVN deployments. Previously, traffic on VLAN provider networks was centralized even with the Distributed Virtual Router (DVR) feature enabled.

3.1.2. Enhancements

This release of Red Hat OpenStack Platform features the following enhancements:

BZ#1689706
This enhancement includes OpenStack CLI (OSC) support for Block Storage service (cinder) API 3.42. This allows OSC to extend an online volume.

BZ#1813560
With this update, the Red Hat OpenStack Platform (RHOSP) 17 Octavia amphora image now includes HAProxy 2.4.x as distributed in Red Hat Enterprise Linux (RHEL) 9. This will improve the performance of Octavia load balancers; including load balancers using flavors with more than one vCPU core.

BZ#1903610
This enhancement adds the MemcachedMaxConnections parameter. This parameters controls the maximum number of memcache connections.

BZ#1904086
This enhancement adds the ability to view a volume Encryption Key ID using the cinder client command `cinder --os-volume-api-version 3.64 volume show <volume_name>`. You must specify microversion 3.64 to view the value.

**BZ#1944872**
This enhancement adds the `--limit` argument to the `openstack tripleo validator show history` command. This allows the user to show only a specified number of the most recent validations.

**BZ#1954103**
This enhancement adds the ability for the PluginInstanceFormat parameter for collectd to specify more than one value.

**BZ#1954274**
This enhancement improves the operating performance of the Bare Metal Provisioning service (ironic) to optimize the performance of large workloads.

### 3.1.3. Release Notes

This section outlines important details about the release, including recommended practices and notable changes to Red Hat OpenStack Platform. You must take this information into account to ensure the best possible outcomes for your deployment.

**BZ#1813573**
This enhancement includes Octavia support for object tags. This allows users to add metadata to load balancer resources and filter query results based on tags.

**BZ#1966898**
In Red Hat OpenStack Platform (RHOSP) 17, panko and its API have been removed from the distribution.

**BZ#2022714**
In Red Hat OpenStack Platform (RHOSP) 17, the collectd-write_redis plugin will be removed.

**BZ#2065540**
In Red Hat OpenStack Platform (RHOSP) 17, the ability to deliver metrics from collectd to gnocchi is removed.

**BZ#2110586**
RHOSP 17.0 beta requires Ceph containers based on ceph5-rhel8 beta content.

**BZ#2111015**
In an ML2/OVS deployment, Open vSwitch (OVS) does not support offloading OpenFlow rules that have the `skb_priority`, `skb_mark`, or output queue fields set. Those fields are needed to provide quality-of-service (QoS) support for virtio ports.

If you set a minimum bandwidth rule for a virtio port, the Neutron Open vSwitch agent marks the traffic of this port with a Packet Mark Field. As a result, this traffic cannot be offloaded, and it affects the traffic in other ports. If you set a bandwidth limit rule, all traffic is marked with the default 0 queue, which means no traffic can be offloaded.

As a workaround, if your environment includes OVS hardware offload ports, disable the packet marking in the nodes that require hardware offloading. After you disable the packet marking, it will not be possible to set rate limiting rules for virtio ports. However, differentiated services code point (DSCP) marking rules will still be available.

In the configuration file, set the `disable_packet_marking` flag to `true`. After you edit the configuration file, you must restart the `neutron_ovs_agent` container. For example:

```bash
$ cat `/var/lib/config-data/puppet-`
3.1.4. Known Issues

These known issues exist in Red Hat OpenStack Platform at this time:

**BZ#1374002**
In Red Hat OpenStack Platform (RHOSP) 17.0 Beta deployments that have more than one Controller node, there is a misconfiguration of communication parameters between the DNS service (designate) worker and deployed BIND instances. Workaround: There are no suitable workarounds that can be applied by the user. DNS service functionality is not available until the next RHOSP release.

**BZ#1966157**
There is a limitation when using ML2/OVN with `provider:network_type geneve` with a Mellanox adapter on a Compute node that has more than one instance on the geneve network. The floating IP of only one of the instances will be reachable. You can track the progress of the resolution on this Bugzilla ticket.

**BZ#1966644**
There is currently a known issue where misconfiguration of the OVN load-balancing provider driver causes the load-balancing service (octavia) instances to not receive events such as floating IPs associated with virtual IPs, or health monitor checks. Workaround: In the `driver_agent` pod, make the following edits to the `octavia.conf` file.

1. Add the following lines to the `[ovn]` section:
   ```
   ovsdb_connection_timeout=180
   ovsdb_retry_max_interval=180
   ovsdb_probe_interval=60000
   ```

2. Add the parameter `ovn_sb_connection` to the `[ovn]` section. You can use the same IP address and protocol values from `ovn_nb_connection`, and assign port number 6642:
   ```
   [ovn]
   ovn_nb_connection=tcp:172.17.1.55:6641
   ovn_sb_connection=tcp:172.17.1.55:6642
   ```

3. If you use Transport Layer Security (TLS), add the following lines to the `[ovn]` section:
   ```
   ovn_sb_private_key=<value-of-ovn_nb_private_key>
   ovn_sb_certificate=<value-of-ovn_nb_certificate>
   ovn_sb_ca_cert=<value-of-ovn_nb_ca_cert>
   ```

4. Add the following line to the `[driver_agent]` section:
   ```
   enabled_provider_agents = ovn
   ```

5. Copy the certificates specified by the following properties to the destination folder:
   ```
   ovn_xx_certificate ovn_xx_ca_cert ovn_xx_private_key
   ```
collectd sensubility does not work in Red Hat OpenStack Platform (RHOSP) 17.0. Because of structural changes in RHOSP 17, the healthcheck executable no longer reports “healthy” or “unhealthy”. Instead, it adds a status update to a log history in podman.

There is currently a known issue where ‘undercloud-heat-purge-deleted’ validation fails. This is because it is not compatible with Red Hat OpenStack Platform 17. Workaround: Skip ‘undercloud-heat-purge-deleted’ with ‘--skip-list’ to skip this validation.

There is currently a known issue with UEFI boot for instances. This is due to an underlying RHEL issue.

There is currently a known issue where the Swift API does not work and returns a 401 error when multiple Controller nodes are deployed and Ceph is enabled. A workaround is available at https://access.redhat.com/solutions/6970061.

OVN services such as ovn-metadata-agent may be subject to intermittent problems connecting over SSL to the OVN southbound database. This may cause the services to operate incorrectly.

Live migration fails when executing the QEMU command `migrate-set-capabilities`. This is because the post-copy feature that is enabled by default is not supported. Choose one of the following workaround options:

- **Workaround Option 1**: Set `vm.unprivileged_userfaultfd = 1` on Compute nodes to enable post-copy on the containerized libvirt:
  - Make a new file: `$ touch /etc/sysctl.d/50-userfault.conf`
  - Add `vm.unprivileged_userfaultfd = 1` to `/etc/sysctl.d/50-userfault.conf`
  - Load the file: `$ sysctl -p /etc/sysctl.d/50-userfault.conf`

- **Workaround Option 2**: Set the `sysctl` flag through director, by setting the `ExtraSysctlSettings` parameter.

- **Workaround Option 3**: Disable the post-copy feature completely, by setting the `NovaLiveMigrationPermitPostCopy` parameter to `false`.

If you launch a vGPU instance in RHOSP 17 you cannot delete it, stop it, or move it. When an instance with a vGPU is deleted, migrated off its compute host, or stopped, the vGPU’s underlying mdev device is not cleaned up. If this happens to enough instances, all available mdev devices will be consumed, and no further instances with vGPUs can be created on that compute host.

### 3.1.5. Deprecated Functionality

The items in this section are either no longer supported, or will no longer be supported in a future release.
The use of the QPID Dispatch Router (QDR) for transport of RHOSP telemetry towards Service Telemetry Framework (STF) is deprecated in RHOSP 17.0.

### 3.1.6. Removed Functionality

**BZ#1984889**

In this release, Block Storage service (cinder) backup support for Google Cloud Services (GCS) has been removed.

**BZ#2023893**

In Red Hat OpenStack Platform 17.0, a dependency has been removed from the distribution so that the subpackage `collectd-memcached` cannot be built anymore. The collectd- `memcached` plugin provides similar functionality to that of `collectd-memcached`.

**BZ#2101948**

In Red Hat OpenStack Platform 17.0, the collectd processes plugin has been removed from the default list of plugins. Loading the collectd processes plugin can cause logs to flood with messages, such as "procs_running not found".
CHAPTER 4. DOCUMENTATION CHANGES

The following table details changes made to the documentation set between releases that include adding new features, enhancements, and corrections. The table also details the addition of new titles and the removal of retired or replaced titles. For information about documentation changes that are delivered at release time, see Top new documentation features

Table 4.1. Document changes

<table>
<thead>
<tr>
<th>Date</th>
<th>Version changed in</th>
<th>Component</th>
<th>Description of change</th>
<th>Affected content</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 Aug 2022</td>
<td>17.0 Beta</td>
<td>All</td>
<td>The documentation section of the top new features section of these release notes provide all the new documentation changes made for this release.</td>
<td>Top new documentation features</td>
</tr>
</tbody>
</table>