

**Dell EMC Ready Architecture
for Red Hat OpenStack Platform**

Release Notes

Version 16.1



Dell EMC Telco Service Provider Solutions

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Notes, cautions, and warnings

-  A **Note** indicates important information that helps you make better use of your system.
-  A **Caution** indicates potential damage to hardware or loss of data if instructions are not followed.
-  A **Warning** indicates a potential for property damage, personal injury, or death.

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Chapter 1


Whats new

Topics:

- [New features](#)

This chapter describes changes for the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 16.1.

New features

- Added support for Dell EMC PowerEdge XE2420 edge servers
 -  **Note:** Please see <https://www.delltechnologies.com/en-us/servers/specialty-servers/poweredge-xe-servers.htm> for more information.
- Added Red Hat OpenStack Platform OVS off-loading using Mellanox ConnectX-5 network adapters
- Added automation support using JetPack for Distributed Compute Nodes (DCN) using multi stacks
- Support for the latest release of Red Hat OpenStack Platform 16.1 including the latest updates
- Support for RHEL 8.2 including the latest updates

Chapter 2

Known anomalies

Topics:

- [Huge Pages](#)
- [OpenStack operations](#)
- [OVS-DPDK](#)
- [SR-IOV](#)

This chapter describes currently-known defects for the Dell EMC Ready Architecture for Red Hat OpenStack Platform version 16.1. Workarounds are provided whenever possible.



Note: Valid login accounts are required to view Red Hat Bugzilla and Dell EMC JIRA defect tracking systems.

Huge Pages

Huge Pages defects in the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 16.1 include:

Dell EMC Jira CES-10218

Issue — Hugepages creation fails on Compute nodes with large RAM size (~768GB)

Tracking Number — Dell EMC Jira [CES-10128](#)

Workaround — N/A

OpenStack operations

OpenStack Operations defects in the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 16.1 include:

Dell EMC Jira CES-10075

Issue — SR-IOV incompatible with VLAN aware VMs

Tracking Number — Dell EMC Jira [CES-10075](#)

Workaround — N/A

Dell EMC Jira CES-11610

Issue — PowerMax Manila not validated in Red Hat OpenStack Platform version 16.1.

Tracking Number — Dell EMC Jira [CES-11610](#)

Workaround — *N/A*

Dell EMC Jira CES-11061

Issue — OSD configuration not correct for PERC H740Ps

For storage nodes with PERC H740P RAID controllers that have both SSDs and HDDs, the OSD configuration has an OSD on every HDD and an OSD on every SSD with colocated WAL/DB.

This configuration is **incorrect**. It should put the WAL/DB on the SSDs and use the HDD as data for the OSDs.

Ceph is supposed to automatically figure out where to put the OSD data/WAL/DB based on the drives given to it. It appears that the RAID controller is hiding the media types of the drives, and Ceph thinks they are all spinners.

ssh into a storage node, run `pvs` to determine the OSD config. The volume groups with names in the format of `ceph-block-dbs-<guid>` are used for storing the ceph OSD DB with names like `ceph-block-<guid>` for storing ceph data. If you do not see any volume group names with `ceph-block-dbs-`, then the WAL/DB are colocated.

Only volume groups like `ceph-block-<guid>` is shown for H740P cases.

Tracking Number — Dell EMC Jira [CES-11061](#)

Workaround — OSD configuration is verified and correct for the BOSS+HBA330 configuration and the PERC H730P configuration.

OVS-DPDK

OVS-DPDK defects in the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 16.1 include:

SR-IOV

SR-IOV defects in the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 16.1 include:

Dell EMC Jira CES-11418

Issue — SR-IOV VF-LAG on four ports is currently not supported. SR-IOV VF-LAG on two-ports is supported in Dell EMC Ready Architecture for Red Hat OpenStack Platform version 16.1. SR-IOV without VF-LAG IS fully supported in version 16.1.

Tracking Number — Dell EMC Jira [CES-11418](#)

Workaround — N/A

This is being tracked as a Red Hat Support case [1703179](#)

Dell EMC Jira CES-11619

Issue — Due to limitations on Mellanox NIC availability, SR-IOV offloading feature has not been validated on Dell EMC PowerEdge XE2420 running Dell EMC Ready Architecture for Red Hat OpenStack Platform version 16.1.

Tracking Number — Dell EMC Jira [CES-11619](#)

Workaround — N/A

Appendix

A

Tempest results notes

Topics:

- [Known test issues](#)

This appendix describes known Tempest failures for the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 16.1. We recommend using the `--skip_file` argument when running tempest which will force tempest to skip running these test as they are known anomalies.

Known test issues

Table 1: Known test issues

Known test issues
Volume
<p>These tests will fail if there is not a default volume type that doesn't set <i>vendor_name</i> or <i>storage_protocol</i> attributes. By default, OpenStack is not deployed with a volume type that meets these specifications, and the test will fail. However, the backend will be valid and fully functional.</p>
<pre>tempest.api.volume.admin.test_volume_types.VolumeTypesV1Test.test_ volume_crud_with_volume_type_and_extra_specs tempest.api.volume.admin.test_ volume_types.VolumeTypesV2Test.test_volume_crud_with_volume_type_and_ extra_specs</pre>
<p>Encrypted volumes are not configured in the Dell EMC Ready Architecture for Red Hat OpenStack Platform by default thus the following encrypted volume related tests will fail.</p>
<pre>tempest.scenario.test_encrypted_cinder_ volumes.TestEncryptedCinderVolumes.test_encrypted_cinder_volumes_ _cryptsetup tempest.scenario.test_encrypted_cinder_ volumes.TestEncryptedCinderVolumes.test_encrypted_cinder_volumes_luks Barbican_tempest_plugin.tests.scenario.test_volume_encryption. VolumeEncryptionTest.test_encrypted_cinder_volumes_cryptsetup</pre>
Object Store Tests
<p>Missing header in responses from RGW cause object store test to fail. Tracking Number – Dell EMC Jira CES-10811 This is being tracked as a Red Hat Bugzilla 1252600</p>

Appendix

B

References

Additional information can be found at the Knowledge Base for Dell EMC Ready and Reference Architectures for OpenStack Platform. This page contains the latest copy of this guide as well as associated solution briefs and white papers. It also contains information on related solutions, including network edge, storage, and Ironic bare metal solutions. Please visit <https://www.dell.com/support/article/us/en/19/sln310368/dell-emc-ready-architecture-for-red-hat-openstack-platform?lang=en>. Or you can e-mail openstack@dell.com.

For more information on Dell EMC Service Provider Solutions, visit <https://www.dell.com/en-us/service-providers/index.htm>