

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

**Release Notes  
Version 16.1-Flex**



**Dell Technologies Solutions**

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## Trademarks

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## Notes, cautions, and warnings

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-  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

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## Whats new

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### Topics:

- [New features](#)

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

## New features

- Added support for Dell EMC PowerFlex software-defined storage software
  - ▣ **Note:** Please see <https://www.delltechnologies.com/en-us/storage/powerflex.htm> for more information.
- Added support for Dell EMC VxFlex Ready Nodes for use with Dell EMC PowerFlex software-defined storage software
  - ▣ **Note:** Please see [https://www.dell.com/en-us/work/shop/productdetailstxn/vxflex-ready-nodes#features\\_section](https://www.dell.com/en-us/work/shop/productdetailstxn/vxflex-ready-nodes#features_section) for more information.
- 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

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# Chapter 2

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## Known anomalies

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### Topics:

- [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-Flex. Workarounds are provided whenever possible.



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



## OpenStack operations

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

### Dell EMC Jira CES-11610

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

**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.

### Dell EMC Jira CES-11826

**Issue** — Octavia deployment fails with PowerFlex

Octavia amphora image failed to upload to Glance in Overcloud deployment. The result, deployment fails in PowerFlex backend.

**Tracking Number** — Dell EMC Jira [CES-11826](#)

**Workaround** —

Complete the following steps:

1. Create the stack with PowerFlex enabled.
2. Update the deployed stack with Octavia enabled.

## OVS-DPDK

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

### Dell EMC Jira CES-11445

**Issue** — VMs with OVS-DPDK enabled on Edge side are not accessible from Director or Controller node

**Tracking Number** — Dell EMC Jira [CES-11445](#)

**Workaround** — N/A

This is being tracked as a Red Hat Support case [02797454](#)

## SR-IOV

SR-IOV defects in the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 16.1-Flex 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-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-Flex. SR-IOV without VF-LAG IS fully supported in version 16.1-Flex.

**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-11447

**Issue** — VMs return "Code: 500, no valid host was found" while creating them on Edge-site1.

**Tracking Number** — Dell EMC Jira [CES-11447](#)

**Workaround** — N/A

This is being tracked as a Red Hat Support case [02819713](#)

### 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-Flex.

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

**Workaround** — N/A

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# Appendix

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## Tempest results notes

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### Topics:

- [Known test issues](#)

This appendix describes known Tempest failures for the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 16.1-Flex. 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
<b>Volume</b>
<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>
<b>Object Store Tests</b>
<p>Missing header in responses from RGW cause object store test to fail.  <b>Tracking Number</b> – Dell EMC Jira <a href="#">CES-10811</a>  This is being tracked as a Red Hat Bugzilla <a href="#">1252600</a></p>

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# Appendix

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## References

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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](mailto:openstack@dell.com).

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