Contents

List of Tables...................................................................................................................... iii
Trademarks........................................................................................................................ iv
Notes, cautions, and warnings ........................................................................................... v

Chapter 1: What's new........................................................................................................ 6
  New features........................................................................................................................................ 7

Chapter 2: Known anomalies............................................................................................. 8
  Huge Pages......................................................................................................................................... 9
  Dell EMC Jira CES-10218........................................................................................................ 9
  OpenStack operations....................................................................................................................... 9
  Dell EMC Jira CES-10075........................................................................................................ 9
  Dell EMC Jira CES-11610........................................................................................................ 9
  Dell EMC Jira CES-11061........................................................................................................ 9
  OVS-DPDK......................................................................................................................................... 10
  SR-IOV............................................................................................................................................... 10
  Dell EMC Jira CES-11418...................................................................................................... 10
  Dell EMC Jira CES-11619...................................................................................................... 10

Appendix A: Tempest results notes.................................................................................. 11
  Known test issues.............................................................................................................................. 12

Appendix B: References................................................................................................... 13
List of Tables

Table 1: Known test issues........................................................................................................12
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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

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
  

- 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

<table>
<thead>
<tr>
<th>Known test issues</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>These tests will fail if there is not a default volume type that doesn't set <code>vendor_name</code> or <code>storage_protocol</code> 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.</td>
<td></td>
</tr>
</tbody>
</table>

```
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
```

**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.**

```
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

### Object Store Tests

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
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.

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