Contents

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

Chapter 1: Whats new........................................................................................................ 6
   Version 13.1 new features................................................................................................. 7

Chapter 2: Known anomalies............................................................................................. 8
   Cinder and Red Hat Ceph Storage...................................................................................... 9
   Dell EMC Jira CES-6155.................................................................................................. 9
   Dell EMC Jira CES-10396.............................................................................................. 9
   Huge Pages........................................................................................................................ 9
   Dell EMC Jira CES-9658.................................................................................................. 9
   Dell EMC Jira CES-10218.............................................................................................. 10
   OpenStack operations........................................................................................................ 10
   Dell EMC Jira CES-5365.................................................................................................. 10
   Dell EMC Jira CES-7740.................................................................................................. 10
   Dell EMC Jira CES-7861................................................................................................. 10
   Dell EMC Jira CES-8755.................................................................................................. 11
   Dell EMC Jira CES-9371.................................................................................................. 11
   Dell EMC Jira CES-10075............................................................................................... 11
   Dell EMC Jira CES-10076............................................................................................... 11
   Dell EMC Jira CES-10565............................................................................................... 11

Appendix A: Tempest results notes.................................................................................. 12
   Known test issues.............................................................................................................. 13

Appendix B: References................................................................................................... 14
   To learn more.................................................................................................................. 15
List of Tables

Table 1: Known test issues..............................................................................................13
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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:  
- Version 13.1 new features

This chapter describes changes for the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 13.1.
Version 13.1 new features

- Support for the latest release of Red Hat OpenStack Platform 13.1 including the latest updates
- Support for latest release of RHEL 7.6 including the latest updates
- Support for Red Hat Ceph Storage version 3.2

Note: See Release Notes for Red Hat Ceph Storage BlueStore support. Release Notes are available on Dell EMC Ready Architecture for Red Hat OpenStack Platform

- Added support for Dell EMC Unity storage for Cinder, Manila, and Glance
- Added support for Dell EMC Networking OS10
- Added support for Dell EMC Networking S5232F-ON switch
- Added support for 100GbE networking with Mellanox ConnectX-5 on compute nodes
- Added support for Red Hat Ceph Storage to use NVMe storage for OSD/Journal
- Added support for network load balancing using OpenStack Octavia
Chapter

2

Known anomalies

Topics:

• Cinder and Red Hat Ceph Storage
• Huge Pages
• OpenStack operations

This chapter describes currently-known defects for the Dell EMC Ready Architecture for Red Hat OpenStack Platform version 13.1. Workarounds are provided whenever possible.

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

Cinder and Red Hat Ceph Storage defects in the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 13.1 include:

Dell EMC Jira CES-6155

**Issue** — On clusters with multi-backend storage with Red Hat Ceph Storage as one of the backends, Red Hat Ceph Storage should be the default block storage Cinder backend, but it is not.

**Tracking Number** — Dell EMC Jira CES-6155

**Workaround** — OSP13 as Overcloud is containerized as follows:

1. ssh into each controller node where the cinder-volume and cinder-scheduler docker containers are running.
2. Edit the `cinder.conf` file, and set the following attribute:

   ```bash
   $ vi /var/lib/config-data/puppet-generated/cinder/etc/cinder/cinder.conf
   default_volume_type = rbd_backend
   ```
3. Save and close `cinder.conf`.
4. Restart the required cinder docker containers. Make sure you have the right container name for the cinder-volume and cinder-scheduler service:

   ```bash
   sudo docker restart openstack-cinder-volume-docker-0
   sudo docker restart cinder_scheduler
   ```
5. Test by creating a volume, and verifying that the volume created is in a Red Hat Ceph Storage backend should be set in the attribute `os-vol-host-attr:host`:

   ```bash
   $ cinder create -- display_name volume1 1
   $ cinder show volume1
   ```

Dell EMC Jira CES-10396

Red Hat Ceph Storage OSD BlueStore is not supported in the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 13.1.

**Tracking Number** — Dell EMC Jira CES-10396

**Workaround** — This is being tracked as a Red Hat Bugzilla 1666822

Huge Pages

Huge Pages defects in the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 13.1 include:

Dell EMC Jira CES-9658

**Issue** — Creating more than three instances with the flavor of 22GB RAM fails.

Observed the following:

- With OVS-DPDK installed on a compute node with 192GB RAM, create a flavor with proper metadata and 22GB RAM.
- Create three instances using this flavor on one compute node.
- It is observed that when a 4th instance is created, it will fail with error - internal error: qemu unexpectedly closed the monitor: 2018-06-01T20:52:23.515598Z qemu-kvm: -object memory-
Known anomalies

backend-file,id=ram-node0,prealloc=yes,mem-path=/dev/hugepages/libvirt/qemu/15-instance-00000092,share=yes,size=23622320128,host-nodes=0,policy=bind

Workaround — This is being tracked as a Red Hat Bugzilla 1586267

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 — Dell EMC Jira CES-10218

OpenStack operations

OpenStack Operations defects in the Dell EMC Ready Architecture for Red Hat OpenStack Platform, version 13.1 include:

Dell EMC Jira CES-5365

Issue — If the Lifecycle Controller of a node is in recovery mode, then it will not run any pending BIOS configuration jobs. As a result, introspection will fail.
Tracking Number — Dell EMC Jira CES-5365
Workaround — The Lifecycle Controller will display recovery on the console during node boot. If the Lifecycle Controller is in recovery mode, then you must go into the iDRAC utility and set it back to enabled.

Dell EMC Jira CES-7740

Issue — The iDRAC console or Web session drops its connection during a Dell EMC Ready Architecture for Red Hat OpenStack Platform installation. This happens when the following commands are run:

• Manual installations: — config_idrac.py
  • Automation installations — config_idracs.py

Tracking Number — Dell EMC Jira CES-7740

Workaround — To work around the issue:

Manual installations:

1. After config_idrac.py completes its run:
   a. Restart the iDRACs.
   b. Reset the iDRAC consoles or Web sessions.

Automation installations:

1. Monitor the /auto_results log on the SAH for "config_idracs.py".
2. After config_idracs.py completes its run:
   a. Restart the iDRACs.
   b. Reset the iDRAC consoles or Web sessions.

Dell EMC Jira CES-7861

Issue — Red Hat does not support Red Hat OpenStack Platform clusters deployed with two (2) Controller nodes.

Tracking Number — Dell EMC Jira CES-7861

Workaround — Use three (3) Controller nodes.
Dell EMC Jira CES-8755

**Issue** — Live Migration after Cold Migration fails on the first attempt. Running a cold migrate of a Virtual Machine (VM) from the original compute will leave an empty instance directory on that compute. A second attempt to Live Migrate back to the original compute will succeed. Dell EMC See Red Hat [bug reference](#).

**Tracking Number** — Dell EMC Jira CES-8755

**Workaround** — Consecutive cold migrations run nominally.

Dell EMC Jira CES-9371

**Issue** — Migration for Pinned instances is failing.

When the Virtual Machine (VM) first starts, Nova runs its fitting logic (using schedulers) and decides what pCPUs the VM needs to run on. When one migrates to a new host, Nova should be running that fitting logic again, because the pCPUs that are unused on the target host may not be the same as the pCPUs it was initially running on. Nova is currently broken and never re-runs the fitting logic on migration.

**Tracking Number** — Dell EMC Jira CES-9371

**Workaround** — We recommend to avoid instances using dedicated pCPU policy/NUMA placement for migration purpose.

There are open bug(s) to solve this issue. See Red Hat [bug reference](#).

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-10076

**Issue** DVR+SRIOV enabled deployment. Duplicate packets are observed on the external network with DVR and SRIOV enabled deployment. Needs separate provider networks for SRIOV traffic to resolve this issue. It will also require extra interfaces on controller nodes.

**Tracking Number** — Dell EMC Jira CES-10076

**Workaround** — N/A

Dell EMC Jira CES-10565

**Issue** — Cold Migration is not working with Manila Unity.

Cold migration is not working with an instance which has a share mount.

However, live migration and host evacuation is working fine in the case where the instance has the share mounted.

**Tracking Number** — Dell EMC Jira CES-10565

**Workaround** — N/A

This is being tracked as a Red Hat Bugzilla 1703179
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 13.1. 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>
<tr>
<td>tempest.api.volume.admin.test_volume_types.VolumeTypesV1Test.test_volume_crud_with_volume_type_and_extra_specs</td>
<td></td>
</tr>
<tr>
<td>tempest.api.volume.admin.test_volume_types.VolumeTypesV2Test.test_volume_crud_with_volume_type_and_extra_specs</td>
<td></td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>tempest.scenario.test_encrypted_cinder_volumes.TestEncryptedCinderVolumes.test_encrypted_cinder_volumes_cryptsetup</td>
<td></td>
</tr>
<tr>
<td>tempest.scenario.test_encrypted_cinder_volumes.TestEncryptedCinderVolumes.test_encrypted_cinder_volumes_luks</td>
<td></td>
</tr>
<tr>
<td>Manila</td>
<td></td>
</tr>
<tr>
<td>The Manila Tempest plugin is not supported.</td>
<td></td>
</tr>
<tr>
<td>This is being tracked as a Red Hat Bugzilla 1703185</td>
<td></td>
</tr>
</tbody>
</table>
Appendix B

References

Topics:
- To learn more


Note: If you need additional services or implementation help, please contact your Dell EMC sales representative.
To learn more


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