

**Dell EMC Ready Bundle for
Red Hat OpenStack Platform**
Release Notes
Version 10.1



Dell EMC Converged Platforms and 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

Before You Begin

Topics:

- [*Red Hat Storage Console VM Functionality*](#)

The Dell EMC Ready Bundle for Red Hat OpenStack Platform includes software from several parties. You should be aware of updates and information that may impact your deployment.

Red Hat Storage Console VM Functionality

For version 10.1 of the Dell EMC Ready Bundle for Red Hat OpenStack Platform, the Red Hat Storage Console VM is supported for monitoring a Ceph Storage cluster only. No configuration options through the console are supported.

Chapter 2

Enhancements

Topics:

- [Version 10.1 Enhancements](#)

This chapter describes enhancements for the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1.

Version 10.1 Enhancements

Enhancements include:

- Support for Red Hat OpenStack Platform version 10
- Support for RHEL 7.4
- Added support for Dell EMC PowerEdge R640 and Dell EMC PowerEdge R740xd
- Removed support for Dell EMC EqualLogic (PS Series)
- Removed support for Dell EMC PowerEdge R430
- Support for updating the BIOS and firmware on the following servers:
 - Dell EMC PowerEdge R640
 - Dell EMC PowerEdge R740xd
- Documentation additions:
 - A new, consolidated [Red Hat OpenStack Platform Operations Guide](#) replaces three prior documents:
 - [Red Hat OpenStack Platform BIOS and Firmware Update Guide](#), version 10.0.1
 - [Red Hat OpenStack Platform Adding and Removing Compute and Storage Nodes](#), version 10.0.1
 - [Red Hat OpenStack Platform Automated RHOSP Update-Upgrade Guide](#), version 6.0.1

Chapter

3

Fixes

Topics:

- [Version 10.1 Fixes](#)

This chapter describes issues in the Dell EMC Ready Bundle for Red Hat OpenStack Platform that have been corrected since the prior release.

Version 10.1 Fixes

Subscriptions are required to view Red Hat Bugzilla and Dell EMC JIRA defect tracking systems.

Table 1: Dell EMC Ready Bundle for Red Hat OpenStack Platform Fixes

Issue	Component	Tracking Number
Automation fails to delete ironic nodes in the Overcloud that are in the <i>clean wait</i> state during redeployment.	Deployment	Dell EMC Jira CES-7650
While using the Horizon GUI, if you edit a file on your disk that is stored in a container, an error similar to the following is displayed when you attempt to upload the latest version of that file with the <i>Update object</i> control: Object with the name already exists This same operation completes successfully when using the CLI.	Horizon and Red Hat Ceph Storage	Launchpad 1572635
The BIOS setting <i>Non RAID Disk Mode</i> can cause RAID configuration failures when set to <i>disabled</i> . As a result, nodes cannot be provisioned	BIOS	N/A
The following error message, as well as a kernel stack trace, may appear in log files on Red Hat Ceph Storage nodes: WARNING: at fs/xfs/xfs_aops.c:1244 xfs_vm_releasepage	Cinder and Red Hat Ceph Storage	https://access.redhat.com/solutions/2893711

Chapter

4

Known Anomalies

Topics:

- [BIOS](#)
- [Cinder and Red Hat Ceph Storage](#)
- [Dell EMC PowerEdge FX](#)
- [Deployment](#)
- [Horizon and Ephemeral Storage](#)
- [Host Migration](#)
- [Instance High Availability](#)
- [OpenStack Operations](#)

This chapter describes currently-known defects for the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1. Workarounds are provided whenever possible.



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

BIOS

BIOS defects in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1 include:

- [Dell EMC Jira CES-7739](#) on page 16

Dell EMC Jira CES-7739

Issue — The BIOS setting *Non RAID Disk Mode* can cause RAID configuration failures when set to *disabled*. As a result, nodes cannot be provisioned.

Tracking Number — Dell EMC Jira [CES-7739](#)

Workaround — On system boot:

1. Press `[F2]` to invoke the BIOS System Setup console.
2. Navigate to *Device Settings > Integrated Raid Controller 1 > Controller Management > Advanced Controller properties > Non RAID Disk Mode*.
3. Change the setting from *disabled* to *enabled*.
4. Continue the system boot process.

Nodes should now be able to be provisioned.

Cinder and Red Hat Ceph Storage

Cinder and Red Hat Ceph Storage defects in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1 include:

- [Dell EMC Jira CES-6155](#) on page 16
- [RHBA-2017:3223 OpenStack/Cinder Bug Fix Advisory](#) on page 17

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 — To set Red Hat Ceph Storage as the default block storage Cinder backend:

1. Initiate `ssh` sessions to each Controller node.
2. Edit the `cinder.conf` file, and set the following attribute:

```
$ vi /etc/cinder/cinder.conf

default_volume_type = rbd_backend
```

3. Save and close `cinder.conf`.
4. Restart the required services:

```
sudo systemctl restart openstack-cinder-api
sudo systemctl restart openstack-cinder-backup
sudo systemctl restart openstack-cinder-scheduler
sudo systemctl restart openstack-cinder-volume
```

5. Test by creating a volume, and verifying that the volume created is in a Red Hat Ceph Storage backend:

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


RHBA-2017:3223 OpenStack/Cinder Bug Fix Advisory

Issue — The `delete_volume` function of the Dell EMC SC Series driver was unaware of migration, and it did not check that the `delete` command was sent to the correct backend. Consequently, the driver could delete a wrong volume. The problem has been fixed in a newer driver. The driver checks the volume before it deletes it from the configured backend. As a result, the migration completes successfully and the correct volume is deleted.

Tracking Number — [RHBA-2017:3223](#)

Workaround — If using the Dell EMC SC Series, ensure that the drivers are updated per the advisory.

Dell EMC PowerEdge FX

Dell EMC PowerEdge FX and Networking defects in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1 include:

- [Dell EMC Jira CES-7643](#) on page 17

Dell EMC Jira CES-7643

Issue — Currently, Dell EMC PowerEdge FX chassis blades are not assigned individual IP addresses via DHCP. Node discovery discovers the chassis' service tag and assigns it to all the blades, which are then all assigned the chassis' IP address.

Tracking Number — Dell EMC Jira [CES-7643](#)

Workaround — Assign static IP addresses to individual blades in a Dell EMC PowerEdge FX chassis.

Deployment

Deployment defects in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1 include:

- [Dell EMC Jira CES-5365](#) on page 17
- [Dell EMC Jira CES-6220](#) on page 17
- [Dell EMC Jira CES-7740](#) on page 18
- [Dell EMC Jira CES-7861](#) on page 18
- [Dell EMC Jira CES-7997](#) on page 18
- [Dell EMC Jira CES-8551](#) on page 19
- [Dell EMC Jira CES-8663](#) on page 19
- [Red Hat Bugzilla 1394888](#) on page 19

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-6220

Issue — The automation code expects the number of nodes that get registered in ironic to match the number of nodes in the *sample.ini* and *sample-fx.ini* files. If the number of nodes does not match, then an error is declared.

Tracking Number — Dell EMC Jira [CES-6220](#)

Workaround — When `use_custom_instack_json` is set to `True` in the *sample.ini* and *sample-fx.ini* files, the user is responsible for ensuring the iDRAC node info (specifically, the iDRAC address) precisely matches the initialization files.

Dell EMC Jira CES-7740

Issue — The iDRAC console or Web session drops its connection during a Dell EMC Ready Bundle 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-7997

Issue — Upon Dell EMC Ready Bundle for Red Hat OpenStack Platform cluster deployment completion the `~/pilot/overcloud_deployment.log` file is zero (0) bytes in size, providing no information about what was deployed.

Tracking Number — Dell EMC Jira [CES-7997](#)

Workaround — To work around the issue:

1. Depending upon your server architecture, open one of the following files in a text editor of your choice:
 - Dell EMC PowerEdge R-Series — *sample.ini*
 - Dell EMC PowerEdge FX — *sample-fx.ini*
2. Change the `deploy_overcloud_debug` variable setting to `true`.
3. Save the file.
4. Redeploy the cluster.

The `~/pilot/overcloud_deployment.log` will now contain useful debug data.

Dell EMC Jira CES-8551

Issue — While deploying the SAH node, if the `osp_sah.img` file is mounted to virtual media that is set to HTML5, super block errors result when it attempts to read the `osp_sah.ks` portion. HTML5 does not allow attaching read/write devices.

Tracking Number — Dell EMC Jira [CES-8551](#)

Workaround — Set the virtual media to Java or ActiveX instead, and then remount the `osp_sah.img` file.

Dell EMC Jira CES-8663

Issue — During execution of `config_idracs.py`, a deployment may stop with an error similar to the following:

```
DRACEmptyResponseField: Attribute 'PCIVendorID' is not nullable, but no value received
```

Tracking Number — Dell EMC Jira [CES-8663](#)

Workaround — Rerun the following commands until successful:

- Automated deployments:

```
# python deployer.py -s /root/acme.ini --overcloud_only
```

- Manual deployments:

```
$ config_idracs.py
```

Red Hat Bugzilla 1394888

Issue — On Overcloud nodes, the partitions that are created do not consume all of the available disk space. This is because the Dell EMC iDRAC driver does not yet support UEFI boot mode, and instead uses the legacy BIOS boot mode.

Tracking Number — Red Hat Bugzilla [1394888](#)

Workaround — After deployment, manually create partitions for the non-partitioned space, and then use those partitions as you see fit.

Horizon and Ephemeral Storage

Horizon and Ephemeral Storage defects in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1 include:

- [Launchpad 1678109](#) on page 19

Launchpad 1678109

Issue — In the Horizon Instance launcher, when selecting Image or Image snapshot as boot source, the *Create New Volume* option is set to **Yes** by default. This will initially create the instance via an image, but then store it on a volume.

Tracking Number — Launchpad [1678109](#)

Workaround — To create a true ephemeral image using Horizon:

1. Click on Launch Instance
2. Select the following options:
 - a. *Select Boot Source* = **Image**
 - b. *Create New Volume* = **No**

Host Migration

Host Migration defects in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1 include:

- [Red Hat Bugzilla 1245617](#) on page 20
- [Red Hat Bugzilla 1267598](#) on page 20
- [Red Hat Bugzilla 1514256](#) on page 20

Red Hat Bugzilla 1245617

Issue — Cold migrate of host does not migrate the instances from source host.

Tracking Number — Red Hat Bugzilla [1245617](#)

Workaround — Configure SSH keys on the Compute nodes as documented [here](#).

Red Hat Bugzilla 1267598

Issue — If local ephemeral storage is being used, `nova resize` and `Cold migration` operations do not currently function.

Tracking Number — Red Hat Bugzilla [1267598](#)

Workaround — Configure SSH keys on the Compute nodes as documented [here](#).

Red Hat Bugzilla 1514256

Issue — Running a cold migration (`nova migrate`) of a VM from the original Compute node will leave an empty instance directory on that node. If you try to live migrate (`nova live-migration`) the instance from the current Compute node back to the original, it will fail on the first attempt.

Tracking Number — Red Hat Bugzilla [1514256](#)

Workaround — A second attempt to live migrate back to the original Compute node will succeed.

Instance High Availability

Instance HA defects in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1 include:

- [Red Hat Bugzilla 1491767](#) on page 20

Red Hat Bugzilla 1491767

Issue — Currently, instances will work on the first attempt to evacuate them from a node, but will go into an `ERROR` state if you attempt to evacuate them a second time.

Tracking Number — Red Hat Bugzilla [1491767](#)

Workaround — None.

OpenStack Operations

OpenStack Operations defects in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1 include:

- [Red Hat Bugzilla 1484480](#) on page 21

Red Hat Bugzilla 1484480

Issue — Attempting to run `ping` from an Overcloud node, when connected via SSH as the *heat-admin* user, results in an error message similar to the following being displayed:

```
ping: socket: Operation not permitted
```

Tracking Number — Red Hat Bugzilla [1484480](#)

Workaround — Execute the `sudo ping` command to run `ping` as *heat-admin*.

Appendix

A

Tempest Results Notes

Topics:

- [Failing Tests](#)

This appendix describes known Tempest failures for the Dell EMC Ready Bundle for Red Hat OpenStack Platform, version 10.1.

Failing Tests

Table 2: Failing Tests

Failing Tests
Cinder
These tests are 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.
<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>
Cinder backup service is not deployed and configured in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, thus the following backup related tests will fail.
<pre>tempest.api.volume.admin.test_volumes_backup.VolumesBackupsV1Test.* tempest.api.volume.admin.test_volumes_backup.VolumesBackupsV2Test.*</pre>
Encrypted volumes are not configured in the Dell EMC Ready Bundle for Red Hat OpenStack Platform by default, thus the following encrypted volume related tests will fail.
<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</pre>
Neutron
Neturon Distributed Virtual Router (DVR) has production support in the Dell EMC Ready Bundle for Red Hat OpenStack Platform, albeit with some limited functionality. The following tests may fail depending on the Neutron configuration.
<pre>neutron.tests.tempest.api.admin.test_routers_ dvr.RoutersTestDVR.test_centralized_router_update_to_dvr neutron.tests.tempest.api.test_routers.DvrRoutersTest.test_ convert_centralized_router</pre>
Nova
These tests are failing due to regression in an RHOSP 10 configuration option: <code>nova.conf#schedule_filter</code> . The default has changed and passing incorrect <code>scheduler_hints</code> to the following tempest tests, causing the tests to fail. See logged Bugzilla defect: 1441809
Telemetry

Failing Tests

Telemetry installation is now configured to use Gnocchi in Dell EMC Ready Bundle for Red Hat OpenStack Platform. Please use the Gnocchi API available on the metric endpoint to retrieve data. Therefore Ceilometer API tests may fail.

```
ceilometer.tests.tempest.api.test_telemetry_  
notification_api.TelemetryNotificationAPITest.test_check_  
glance_v1_notifications  
  
ceilometer.tests.tempest.api.test_telemetry_  
notification_api.TelemetryNotificationAPITest.test_check_  
glance_v2_notifications  
  
ceilometer.tests.tempest.api.test_telemetry_  
notification_api.TelemetryNotificationAPITest.test_check_  
nova_notification
```

Appendix

B

References

Topics:

- [To Learn More](#)

Additional information can be obtained at <http://www.dell.com/en-us/work/learn/openstack-cloud> or by e-mailing openstack@dell.com.

If you need additional services or implementation help, please contact your Dell EMC sales representative.

To Learn More

For more information on the Dell EMC Ready Bundle for Red Hat OpenStack Platform visit <http://dell.com/openstack>.

This document and all other related architecture and technical guides can be found in the Dell EMC TechCenter community at <http://en.community.dell.com/techcenter/cloud/w/wiki/12047.dell-emc-red-hat-openstack-cloud-solutions>

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