

**Oracle[®] Virtual Networking ML2 Mechanism
Driver for OpenStack Neutron**

Product Notes



**VIRTUAL
NETWORKING**

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Using This Documentation

This document provides last-minute information about Oracle Virtual Networking ML2 Mechanism Driver for OpenStack Neutron. This document is written for system administrators, authorized service providers, and users who have experience administering advanced networks.

- “Related Documentation” on page v
- “Feedback” on page v
- “Access to Oracle Support” on page vi

Related Documentation

Documentation	Links
All Oracle products	http://docs.oracle.com
Oracle Virtual Networking	http://docs.oracle.com/goto/ORACLE-VIRTUAL-NETWORKING/docs

Feedback

Provide feedback about this documentation at:

<http://www.oracle.com/goto/docfeedback>

Access to Oracle Support

Oracle customers have access to electronic support through My Oracle Support. For information, visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or visit <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs> if you are hearing impaired.

Late-Breaking Information

These topics provide late-breaking information about the Oracle Virtual Networking ML2 Mechanism Driver for OpenStack Neutron.

- [“What’s New in This Release”](#) on page 1
 - [“Minimum Requirements”](#) on page 2
 - [“Downloading and Installing the Driver”](#) on page 3
 - [“Known Issues”](#) on page 4
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What’s New in This Release

This software release is the first to support the Oracle Virtual Networking ML2 Mechanism Driver for OpenStack Neutron. When installed, the driver supports host servers, controllers, and compute nodes in OpenStack deployments.

By using the Oracle Fabric Manager GUI and the Horizon dashboard, you can create PVIDs (instead of OpenStack OpenVSwitches with VLANs, XLANs, and GRE) to connect Oracle VMs and Oracle Linux 6 Update 5 hosts into OpenStack software-defined networks.

Minimum Requirements

These topics provide minimum system requirements for the driver.

- “Supported OS Levels” on page 2
- “Supported HCAs” on page 2
- “System Limitations and Restrictions” on page 3

Supported OS Levels

This release of the driver is supported on the following OSs.

- Oracle Linux 6 Update 5, either Oracle Unbreakable Kernel or Oracle Red Hat-compatible kernel
- Oracle VM 3.3.1

Note – This release of the driver is supported in specific configurations. For information, refer to the *Oracle Virtual Networking ML2 Mechanism Driver for OpenStack Neutron Installation Guide*.

Supported HCAs

This driver release supports Oracle HCAs as well as third-party manufacturers’ HCAs with the requirement that the HCAs use the required version of firmware. Refer to the HCA’s product notes for latest firmware versions.

TABLE 1 Supported Oracle HCAs

HCA	Documentation Link
Sun InfiniBand Dual Port 4x QDR PCIe Low Profile Host Channel Adapter M2	http://docs.oracle.com/cd/E19241-01/index.html
Sun InfiniBand Dual Port 4x QDR PCIe ExpressModule Host Channel Adapter M2	http://docs.oracle.com/cd/E19157-01/index.html
Oracle Dual Port QDR InfiniBand Adapter M3	http://docs.oracle.com/cd/E40985_01/index.html

For third-party HCAs, consult the manufacturer's documentation for the required firmware version.

Supported Firmware Versions for HCAs

Oracle HCAs might require a firmware upgrade to support the Oracle Virtual Networking host drivers for supported host OSs.

The driver has no specific HCA or firmware requirements of its own. Such requirements are determined by the host OSs.

For information about the HCA firmware requirements, refer to the product notes for the appropriate Oracle Virtual Networking host driver for your server OS(s).

System Limitations and Restrictions

These topics describe system limitations and restrictions for the driver.

- [“Virtual Resources Supported” on page 3](#)
- [“System Platforms Supported” on page 3](#)

Virtual Resources Supported

This release of the driver supports a maximum of 16, non-HA PVI vNICs (PVI). Since 1 PVI vNIC supports 1 tenant network, a maximum of 16 tenant networks is supported.

System Platforms Supported

This release of driver is supported on the Oracle Fabric Interconnect F1-15 and Oracle Fabric Interconnect F1-4.

Downloading and Installing the Driver

These topics provide a summary of steps to download and install the driver.

- [“Download the Driver” on page 4](#)
- [“Install the Driver” on page 4](#)

▼ Download the Driver

The driver is an RPM file that is packaged in a ZIP file.

1. Log on to:

<http://oracle.support.com>

2. Click the Patches and Updates tab.

3. In the work area, click the Search tab.

4. Click the Product or Family (Advanced) link.

5. In the Product Is field, enter Oracle Fabric Manager.

6. In the Release Is field, select the driver.

7. Click Search to find the driver.

8. On the driver page, click the filename to download the ZIP file to a network-accessible node.

9. Before installing the driver, read any README file or other text file for more information.

10. Unzip the ZIP file, and proceed to [“Install the Driver”](#) on page 4.

▼ Install the Driver

- **Install the driver.**

Refer to the Installation topic in the *Oracle Virtual Networking ML2 Mechanism Driver for OpenStack Neutron Installation Guide*.

Known Issues

The following known issues exist in this release of the driver.

Bug ID	Description
20515148	<p>Unable to Set a Gateway After a Gateway Has Been Removed</p> <p>A problem occurs when a router is an associated gateway to an external network, and the gateway is deleted, then reassocated with the same external network. In this situation, attempting to reassign the gateway fails because Neutron still has a record of the router-to-gateway association, and disallows the API call that deletes the association.</p> <p>Workaround: Delete the existing router and create a new router with the new gateway.</p>
20239764	<p>An Available, But Older, DHCP Agent Version Causes dnsmasq to Fail</p> <p>An older version of dnsmasq can cause DHCP (or the DHCP agent) to generate IP addresses for VMs, but not actually assign them to the VMs. The minimum version dnsmasq that should be used is 2.65.</p> <p>When using YUM, the older version of dnsmasq might be included in the repository. (Related to 20353846).</p> <p>Workaround:</p> <ol style="list-style-type: none"> 1. Check for the older version by issuing <code>rpm -qa grep dnsmasq</code> If a version earlier than 2.65 is present, go to the next step. 2. Upgrade to at least DHCP version 2.65 for Oracle Linux 6: <code>rpm -Uvh dnsmasq-2.65-1.el6.rfx.x86_64.rpm</code>
20163581	<p>The Driver Does Not Properly Report Oracle Fabric Manager Failures to OpenStack Users</p> <p>Sometimes, vNIC creation jobs that fail in Oracle Fabric Manager client are not propagated up to the OpenStack Neutron layer. As a result, OpenStack users might not be able to recognize the silent failure, and networking might appear to be nonfunctional.</p> <p>Workaround: If networking connectivity issues occur (for example, if VMs do not receive IP addresses from DHCP, or if VMs cannot ping each other), users can consult Oracle Fabric Manager's Jobs panel as part of investigating the problem.</p>

