

**Oracle® Virtual Networking QDR and EDR
Host Drivers for Oracle VM 3.4.1 Release
Notes**

ORACLE®

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Using This Documentation

- **Overview** – Provides late-breaking information about Oracle Virtual Networking host driver for Oracle VM 3.4.1.
- **Audience** – System administrators, authorized service providers, and users who have experience in administering advanced networks.
- **Required knowledge** – Advanced experience in using Oracle Virtual Networking host drivers for Oracle VM.

Product Documentation Library

Documentation and resources for this product and related products are available at <http://www.oracle.com/goto/Oracle-Virtual-Networking/docs>

Feedback

Provide feedback about this documentation at <http://www.oracle.com/goto/docfeedback>

Late-Breaking Information

These topics provide late-breaking information about Oracle Virtual Networking host drivers for Oracle VM.

- [“What's New in This Release” on page 9](#)
- [“Minimum Requirements” on page 9](#)
- [“Downloading the Host Drivers” on page 11](#)
- [“Known Issues” on page 12](#)

What's New in This Release

This release of Oracle Virtual Networking host drivers support hosts running Oracle VM 3.4.1 hypervisor.

This version of host drivers provides the following functionality:

- Oracle Software Defined Networking (SDN) and PVI vNICs
- Support for InfiniBand stack version `kernel-ib 1.5.5.151`
- Local boot from the Oracle VM server's hard drive
- ConnectX-2 Single and Dual Port HCAs. See [“Supported HCAs” on page 10](#).

The following features are not yet supported:

- PXE install, SAN install
- SAN boot, iSCSI boot

Support for Oracle VM 3.2.6 has a consideration about adding LUNs. For more information, see [“Manual Addition of a Virtual or Physical Disk” on page 11](#).

Minimum Requirements

These topics provide minimum system requirements for the host drivers.

- [“Supported OS Levels” on page 10](#)

- [“Supported HCAs” on page 10](#)
- [“System Limitations and Restrictions” on page 10](#)

Supported OS Levels

This release provides initial support for kernel versions 2.6.39-300. 32.6.e15uek.

Supported HCAs

This host 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 Oracle HCA's product notes for latest firmware versions.

The following Oracle HCAs are supported.

Supported Oracle HCAs	Documentation
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 Express Module 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, refer to the manufacturer's documentation for the required firmware version.

Support for HA vNICs

You must create two separate vNICs from each Oracle Fabric Interconnect and create a bonded interface in Oracle VM to support HA vNICs on an Oracle VM server. For information about creating a bonded interface, refer to the Oracle VM server software documentation. Creating HA vNICs on an Oracle VM server by using the Oracle XgOS CLI or Oracle Fabric Manager is not supported in this release.

System Limitations and Restrictions

- [“Virtual Resources Supported” on page 11](#)

- [“Boot Methods” on page 11](#)

Virtual Resources Supported

This release of the host drivers supports the following number of virtual resources for each host.

I/O Resource	Maximum of Type
vNICs	<ul style="list-style-type: none"> ■ Eight standalone vNICs ■ Four pairs of bonded vNICs
vHBAs	<ul style="list-style-type: none"> ■ Four standalone vHBAs ■ Two pairs of multipath vHBAs

Boot Methods

This host driver release supports only the local boot from server's hard driver. SAN install, PXE install, and SAN/iSCSI boot are not supported.

Manual Addition of a Virtual or Physical Disk

A newly added storage disk is not automatically recognized. You must manually add the virtual or the physical disk. You need to use the `xsgio-scan -r -a` command in the Oracle VM server. This command is required only in some situations and not all.

- On storage, if the LUN is already created and associated with the vHBA WWPN before adding the vHBA on the Oracle Fabric Interconnect, then the target is already visible on the Oracle Fabric Interconnect as the vHBA comes up. In this situation, the `xsgio-scan -r -a` command is not required.
- If the vHBA is created on the Oracle Fabric Interconnect first, and then the LUN is created on storage and mapped to the vHBA, the target is not already visible. In this situation, the `xsgio-scan -r -a` command is required to make the LUN visible to Oracle VM hosts.
- Regardless of whether the LUN is configured before or after the vHBA is added to the Oracle Fabric Interconnect, anytime LUN masking is enabled to the vHBA, the `xsgio-scan -r -a` command is required to make the LUN visible to the Oracle VM hosts.

Downloading the Host Drivers

This release of host drivers supports Oracle VM 3.4.1 hosts through the following RPM file:

`xsgio-hostdrivers-kmod-2.6.39_300.32.5.el5uek.5.0.7.LX-1.x86_64.rpm`

Known Issues

The following known issues are for this release of Oracle Virtual Networking host drivers for Oracle VM 3.4.1.

Bug ID	Description
16338092	<p>For a PVI vNIC connected to a VM running any OS other than RHEL 6u2, a PVI vNIC will stay in up state even if the vNIC is actually set to down on the Oracle Fabric Interconnect. This problem occurs if you first create the vNIC in a PVI, then set the vNIC interface to none, set the vNIC interface back to the PVI, then attempt to set the vNIC to down.</p> <p>After this series of events, the PVI vNIC will not be set to down state unless the vNIC is in a RHEL 6u2 VM on an Oracle VM 3.4.1 server.</p>
16338065	<p>With iSCSI storage, a problem prevents the deletion of iSCSI LUNs from the array. If you attempt to delete an iSCSI LUN from the iSCSI array, after refreshing Oracle VM Manager the LUN will still be displayed and the port connected to the LUN will be put into an error state. This problem also occurs with physical NICs, so it appears that this is a problem in Oracle VM Manager. Be aware to explicitly delete an iSCSI LUN from Oracle VM Manager. This requirement exists for vNICs and physical NICs alike.</p>
16338007	<p>A problem with Oracle VM hosts prevents passing traffic (even pings) across a PVI vNIC if the MTU is set to 64000 on a RHEL 5u8 virtual machine. During testing, an MTU of 9138 K passed traffic in all cases. Using a 9 K MTU on a PVI vNIC should be used.</p>
16337950	<p>For Oracle VM hosts, a problem in the host drivers prevents a newly added LUN from being automatically recognized.</p> <p>You can workaround this problem by issuing the <code>xsgo-scan -r -a</code> command from the Oracle VM server.</p>
16335100	<p>If an event causes failover or restart of the OpenSM InfiniBand subnet manager, multicast traffic is delayed for approximately seven seconds while the failover or restart occurs.</p>
16334399	<p>Disks can be prevented from being displayed on a Linux host (or VM running in an Oracle VM server). This problem manifests in either of the following ways:</p> <ul style="list-style-type: none"> ■ If LUN Masks are not configured on the Oracle Fabric Interconnect and the vHBA is present, if you then create the LUN and map it to storage, the disk is not automatically displayed. <p>In this situation, you can work around the problem by running a target rescan on the Oracle Fabric Interconnect and then running the <code>xsgo-scan -r -a</code> command on the Oracle VM host to make the LUN visible.</p> <ul style="list-style-type: none"> ■ If LUN Masks are configured on the Oracle Fabric Interconnect, but the vHBA is not already present. then if you create the vHBA and attach it to storage, the disk is not automatically displayed. <p>In this situation, you can work around the problem by running a target rescan on the Oracle Fabric Interconnect and then running the <code>xsgo-scan -r -a</code> command on the Oracle VM host to make the LUN visible. Or, in cases where the vHBA is not already present and is added later, you will need to run the <code>xsgo-scan -r -a</code> command on the Oracle VM 3.4.1 host to make the LUN visible.</p>