

**Oracle® Virtual Networking QDR and EDR
Host Drivers for Oracle Linux 7.2 Release
Notes**

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Using This Documentation

- **Overview** – Provides late-breaking information about Oracle Virtual Networking host driver for Oracle Linux 7.2 (embedded driver).
- **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 Linux.

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 embedded drivers of the Oracle Virtual Networking host drivers for Oracle Linux 7.2.

- [“What's New in This Release” on page 9](#)
- [“Minimum Requirements” on page 9](#)
- [“Downloading and Installing the Host Drivers” on page 11](#)
- [“Disable Oracle Virtual Networking Services and Uninstall User Space RPM” on page 13](#)
- [“Known Issues” on page 14](#)

What's New in This Release

This version of host drivers provides the following new functionality:

- Support for Oracle Linux 7.2, unbreakable enterprise kernel (UEK).
Local boot on hosts is supported in this release. PXE, SAN, and iSCSI boot are not supported.

Minimum Requirements

These topics provide the minimum system requirements for the host drivers.

- [“Supported OS Levels” on page 9](#)
- [“Supported HCAs” on page 10](#)
- [“System Limitations and Restrictions” on page 10](#)

Supported OS Levels

This driver release supports only Oracle Linux 7.2 with UEK and does not support Oracle Linux-based RHCK and Vanilla Red Hat Enterprise Linux-based RHCK kernels. The kernel supported is 3.8.13-98.7.1.el7uek.x86_64.

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 product notes of Oracle HCA for the 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.

System Limitations and Restrictions

- “Virtual Resources Supported” on page 10
- “Boot Methods Supported” 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 Supported
vNICs	<ul style="list-style-type: none"> ■ Eight 10-Gbps vNICs ■ Sixteen 1-Gbps vNICs ■ Four jumbo vNICs, either 1-Gbps or 10-Gbps vNICs with a 9014-byte MTU ■ Four iSCSI vNICs (for iSCSI storage) ■ Eight PVI vNICs ■ 8 EDR uVnics ■ PVI vNICs and standard vNICs can be configured in any combination as long as they are within the maximum limit supported.
vHBAs	<ul style="list-style-type: none"> ■ Eight vHBAs ■ Four multipath vHBAs

Boot Methods Supported

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

Downloading and Installing the Host Drivers

These topics describe how to download and install the host drivers for UEK.

Oracle Virtual Networking supports the UEK that is distributed with Oracle Enterprise Linux ISO. Oracle Virtual Networking host drivers are embedded with Oracle Linux 7.2 OS, and these host drivers are not stand-alone RPMs that you need to install. You must install `userspace_RPM` to activate the host drivers.

Enabling Host Drivers on Embedded Kernels

- [“Installing orclovn-user User Space RPM for Unbreakable Enterprise Kernel” on page 11](#)
- [“Activate the Oracle Virtual Networking Service” on page 12](#)
- [“Verify That the Server Is Detected by the Oracle Fabric Interconnect” on page 13](#)

Installing orclovn-user User Space RPM for Unbreakable Enterprise Kernel

You install `orclovn-user` RPM for UEK either by using an automated installer, such as Yum, or manually.

- [“Install orclovn-user User Space RPM \(Yum\)” on page 11](#)
- [“Install orclovn-user User Space RPM \(Manually\)” on page 12](#)

▼ Install orclovn-user User Space RPM (Yum)

Before installing the host drivers, ensure that these prerequisites are met:

- The Yum repository is reachable through the network by the Oracle Linux server.
- The Yum service is running correctly.
- You have root access to the Yum repository.

You use the `yum install` command to install the kernel and Oracle Virtual Networking user space application from the Yum repository. Using Yum, you do not install the software from the Oracle server or the Oracle Fabric Interconnect.

- **Install the Oracle Virtual Networking user space application.**

For example:

```
# yum install orclovn-user.x86_64
```

- ▼ **Install orclovn-user User Space RPM (Manually)**

If you are not using an automated update manager, you can install the kernel like any other software. Before installing the host drivers, ensure that prerequisites are met:

- The Oracle Linux OS or Oracle VM hypervisor is installed on the server, including all required patches and updates.
- All RPMs for Oracle Virtual Networking are downloaded to the Oracle Linux servers' hard drive. For information about kernel and kernel firmware sites, see *Oracle Virtual Networking Host Drivers for Oracle Linux and Oracle VM Installation Guide*.
- You have root access on the server.

When manually installing the RPMs, you load the UEK2 or UEK3 firmware, kernel, and Oracle Virtual Networking user space application by using the `rpm -ivh` command. Using the manual installation procedure, you install the software directly from the server, not the Oracle Fabric Interconnect.

1. **Download the Oracle Virtual Networking user space.**

Ensure that you are running the minimum package of Oracle OVN user space RPM `orclovn-user-6.0.r7662-1.x86_64.rpm`. If you need assistance, contact My Oracle Support.

2. **Install the Oracle Virtual Networking user space application.**

For example:

```
# rpm -ivh orclovn-user-6.0.r7662-1.x86_64.rpm
```

- ▼ **Activate the Oracle Virtual Networking Service**

Enable the Oracle Virtual Networking service, which is named `xsigo`.

1. **Activate the Oracle Virtual Networking service.**

```
# chkconfig xsigo on
```

2. Verify that the Oracle Virtual Networking service is on.

```
# chkconfig --list xsigo

xsigo 0:off 1:off 2:on 3:on 4:on 5:on 6:off
```

3. Enable the `ovn.service` service.

```
# systemctl enable ovn.service
```

4. Run the setup script to load Oracle Virtual Networking modules.

```
# /opt/xsigo/bin/orclovn-setup -k 3.8.13-98.7.1.el7uek.x86_64 -o native -i
```

For more information about the options available with this utility, type:

```
# /opt/xsigo/bin/orclovn-setup --help
```

5. Reboot the host.

Wait until the host reboots, and then proceed to the next section.

▼ Verify That the Server Is Detected by the Oracle Fabric Interconnect

Verify that the server is detected from the Oracle Fabric Interconnect after the server has completed the reboot.

- **Locate the server.**

```
# show physical-server
name      guid          descr port      os
version   server-profile
-----
halfdome 2c903000451d1 jammu:ServerPort7 Linux/3.8.13-.98.7.1.el7uek.x86_64/x86_64
2.9.1000/3.0.0 halfdome
```

▼ Disable Oracle Virtual Networking Services and Uninstall User Space RPM

- **To uninstall the host driver, you uninstall `orclovn-user` package.**

```
# chkconfig xsigo off
# rpm -e orclovn-user-6.0.r7662-1.el7.x86_64
```

Known Issues

The following known issues are for this release of Oracle Virtual Networking host drivers for Oracle Linux 7.2.

Bug ID	Description
19974945	Cannot Remove Softline With Driver Uninstalled When the <code>ovn.service</code> is enabled at host bootup, it creates a symbolic link to load at boot time. However, when the host drivers are uninstalled, the symbolic link should be removed, but it is not. While the symbolic link remains, this problem is cosmetic and does not affect system functionality.
19435287	Getting Continuous XSCORE Logs on Console When a server profile is attached to a host, continuous <code>xscore</code> messages can be logged on the server's management console. This problem is cosmetic and does not affect system functionality.
