

Oracle Software Defined Network Controller 1.0.0

Release Notes



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Oracle SDN Controller 1.0.0 Release Notes

Oracle SDN Controller runs on an Oracle Enterprise Linux 6.1 32-bit server with Linux kernel 2.6.39, and does not require an Oracle Fabric Interconnect chassis.

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Features Overview

Oracle SDN Controller brings high-speed Ethernet connectivity (Oracle PVI) to your current IB networks without additional hardware. Oracle SDN Controller extends from the software stacks of the Oracle Fabric Interconnect chassis. Oracle SDN Controller is configured and managed with Oracle Fabric Manager 4.2.0 or later, which provides a progressive UI for applying PVI clouds and vNICs.

Key features include:

- Physical server auto-discovery
- PVI cloud management
- PVI vNIC management
- I/O template management
- Multi-tenant support
- IB topology view
- Enhanced performance monitoring

Hardware and Software Requirements

Hardware	Software
Two Oracle SDN Controller servers with 4 GB RAM, 1.6 Ghz CPU, 40 GB disk space, and a standard HCA card.	Oracle Linux 6.1 32-bit, postgresql, postgresql-devel, httpd, httpd-devel, mod_ssl
Oracle Fabric Manager server. Oracle SDN Controller cannot run on the same server as Oracle Fabric Manager. This server does not require an HCA card.	Minimum version 4.2.0. Refer to the <i>Oracle Fabric Manager 4.2.0 User's Guide</i> at: http://docs.oracle.com/cd/E38500_01/
An IB switch. Any IB switch is supported. No cable restrictions.	Open SM must be turned off.
ConnectX DDR or QDR IB-HCA card per host server. Host servers.	IB-HCA firmware (included in OEL 6.1) Oracle Linux, Oracle Virtual Machine, RHEL, ESXi, Windows. For PVI vNIC support: ESX4, ESX5, RHEL 6.2, Oracle Linux 6, all Oracle Virtual Machine versions. See " "Minimum Host Driver Requirements" on page 2.

Minimum Host Driver Requirements

Host	Oracle Virtual Networking Driver Version
Oracle Linux	Oracle Linux 6 Update 3 or 4 (32- or 64-bit). Oracle Xsigo host driver version 5.0.7-LX. This driver supports Oracle Linux and RHEL.
Oracle Virtual Machine	Oracle Xsigo host driver version 3.7.3-OVM3.
RHEL	InfiniBand host driver: kernel-ib-1.5.1-2.6.18. RHEL 6 Update 1. Oracle Xsigo host driver version 5.0.0-LX.
ESXi	ESXi Server 5.x Update 0 (GA). Oracle Xsigo host driver version 5.1.0-ESX.
Windows	Windows Server 2008 R2. Oracle Xsigo host driver version 5.1.0-WIN.

Known Issues

The following are known issues at the time of this release.

Some Objects Not Displayed in Oracle Fabric Manager *Topology View* (17310539)

PVI clouds terminated on Oracle SDN might not get displayed correctly in the *Topology View* page.

Workaround: To check the PVI clouds terminated on Oracle SDN, go to the *Oracle SDN* page and click on the Oracle SDN fabric and check the clouds in *PVI Clouds* tab

Fabric Name Disappears After Managing and Unmanaging Oracle SDN Controller (17486730)

After managing and unmanaging Oracle SDN Controllers, the fabric name might disappear against the PVI cloud.

Oracle SDN Controller Stats Show as Zero (17462646)

The statistics might show zero when adding PVI clouds and vNICs, and passing traffic on an Oracle SDN Controller.

Unable to Edit MTU for PVI Cloud in *I/O Templates* Editor Page (17364748)

In the *I/O Templates* editor page, when you double-click a PVI cloud, the MTU option is disabled.

Workaround: Edit the MTU from the *PVI Cloud Summary* page.

IB Subnet Manager Designation NO Did Not Stop OPEN SM (17464831)

One of the Oracle SDN Controllers must be the subnet manager even if a different option is offered during the first boot configuration.

Although either Oracle SDN Controller can be the IB subnet manager, both active and passive Oracle SDN controllers must have the same configuration for the IB subnet parameter.

Oracle SDN Controller Is Not Seeing Attached Hosts (17314164)

On two-port IB-HCAs, only port 1 is currently supported. If port 2 is used, Oracle SDN Controller does not recognize attached hosts.

Active to Passive Mode Change Failed (17437741)

The timeout for `SwitchControllerMode` is 30 seconds.

Workaround: Wait a few minutes. This process will succeed once the database is cleared.

vNICs on Hosts Are Not Removed When a Backup is Restored (17380186)

Currently the host drivers do not support `sync_begin` and `sync_end`. So, it is possible that a delete vNIC request will not reach the host until the drivers are restarted.

SNMP Secure Users Tab: Error While Selecting Protocol (17448215)

When you add a user and select SHA Authorization Protocol and enter other details, the *Authorization Protocol* and *Privacy Protocol* fields might display none.

Topology View Might Not Show Devices Correctly

This issue might occur after performing either of the two following tasks.

Host Server View

1. Manage OSDN controllers and PVI clouds on the fabric, and add vNICs.
2. Go to *Topology View* page.
3. Double-click the server to under *Servers and Server Groups* to *Fabric Devices Connection*.
4. No icon appears in the *Fabric Devices* column and only switches and physical servers are shown.

Oracle SDN Controller Server View

1. Manage OSDN controllers and PVI clouds on the fabric, and add vNICs.
2. Go to *Topology View* page.
3. Double-click the Oracle SDN Controller under *Servers and Server Groups* to *Fabric Devices Connection*. The *Fabric Device Detail to I/O Clouds* connection page is shown.
4. No connection is displayed between Oracle SDN Controller and PVI clouds.

Oracle SDN Controllers Are Added as Passive Instead of Active State (17380444)

When you initially add an Oracle SDN Controller to Oracle Fabric Manager, it is in passive mode. In addition, when you restart the Oracle SDN controller, the controller comes up in passive mode. You must place the controller in active mode with the *OSDN Controllers Summary* page.

Related Documentation

The following table lists documentation for Oracle SDN Controller and related products located at: http://docs.oracle.com/cd/E38500_01/.

Information Provided	Title
Installation, upgrade, and initial configuration.	<i>Oracle Software Defined Network Controller 1.0.0 User's Guide</i>
Configuration and management.	<i>Oracle Fabric Manager 4.2.0 User's Guide</i>