



Installing Dell™ OpenManage™ Software in a VMware® ESX® Server Software Environment

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Notes, Notices, and Cautions

-  **NOTE:** A NOTE indicates important information that helps you make better use of your computer.
-  **NOTICE:** A NOTICE indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

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1. Overview

This document provides installation steps, usage, and support information for the Dell™ OpenManage™ systems management suite on VMware® ESX Server software.

2. Supported OpenManage Software Versions

Supported OpenManage versions on Dell PowerEdge Servers with VMware ESX Server software are listed in the following matrix:

ESX-OpenManage Support Matrix	PE6650	PE1850	PE1855	PE2850	PE6850 (PERC 4ei)	PE6850 (PERC 5/i)	PE1950	PE1955	PE2900	PE2950	PE6950
ESX 3.0.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1	5.1.1
ESX 3.0.0	5.0, 5.1	5.0, 5.1	5.0, 5.1	5.0, 5.1	5.0, 5.1	5.0, 5.1	5.0, 5.1	5.0, 5.1	X	5.0, 5.1	X
ESX 2.5.4	4.5	4.5	4.5	4.5	4.5	5.0	5.0	5.0	X	5.0	X
ESX 2.5.3	4.5	4.5	4.5	4.5	4.5	X	X	X	X	X	X
ESX 2.5.2	4.5	4.5	4.5	4.5	4.5	X	X	X	X	X	X
ESX 2.5.1	4.3, 4.4, 4.5	4.3, 4.4, 4.5	4.3, 4.4, 4.5	4.3, 4.4, 4.5	4.3, 4.4, 4.5	X	X	X	X	X	X
ESX 2.5.0	4.2, 4.3	4.2, 4.3	4.1.3, 4.2, 4.3	4.2, 4.3	X	X	X	X	X	X	X
ESX 2.1.2	4.1	4.1	X	4.1	X	X	X	X	X	X	X
ESX 2.1	3.8	X	X	X	X	X	X	X	X	X	X
ESX 2.0.1	3.6	X	X	X	X	X	X	X	X	X	X

Legend

- X** ESX is not supported on respective Dell PowerEdge server
- Stated OM version** is supported with respective ESX version and Dell PowerEdge server

This document provides installation steps for OpenManage 4.5 on ESX 2.5.x, OpenManage 5.0 on ESX 2.5.4, and OpenManage 5.x on ESX 3.0.x. For earlier versions of OpenManage, refer to the *Resource Archive* at <http://www.dell.com/vmware>.

For more information on supported servers and storage, consult the document “VMware Software Compatibility Matrix for Dell servers and Dell/EMC storage” in the *Resource Archive* at <http://www.dell.com/vmware>.

3. OpenManage Components and Support Information

Dell OpenManage is a suite of system management applications for managing Dell PowerEdge servers. This section lists the features available in OpenManage and details what is supported and what is not supported when running Dell OpenManage on VMware ESX Server software.

For more information on each of these features, refer to the Dell OpenManage website at <http://www.dell.com/openmanage>.

3.1 Server Administrator

Server Administrator provides single server management with a secure command-line or web-based graphical management user interface. There are several sub-components in Server Administrator:

- **Instrumentation Services:** Provides hardware instrumentation and configuration information. Instrumentation Services are supported in VMware ESX Server.
- **Storage Management:** Provides monitoring and instrumentation of the local storage system. OpenManage Storage Management is supported in VMware ESX Server
- **Remote Access Service:** The Remote Access Service provides a complete, remote system management solution for systems equipped with a DRAC solution. Remote Access Service is supported in VMware ESX Server.
- **Online Diagnostics:** The Diagnostic Service provides a suite of diagnostic programs that run locally on a system or remotely on a system connected to the network. Online Diagnostics are not supported in VMware ESX Server. Diagnostics can be performed offline by downloading utilities from <http://support.dell.com>.

3.2 Dell Remote Access Controller

Dell Remote Access Controller (DRAC) is designed to allow anywhere, anytime "Lights Out" monitoring, troubleshooting, and server repairs/upgrades independent of OS status.

Remote Access Controller is supported in VMware ESX Server.

3.3 IT Assistant

Dell IT Assistant (ITA) provides an integrated view of Dell's comprehensive suite of server monitoring and reporting tools. It includes one-to-many management for Dell Servers.

Hardware monitoring of Dell servers is supported in VMware ESX Server software. Dell IT Assistant does not monitor or perform operations on the Virtual Machines running on the servers. At this time, IT Assistant does not support SNMP traps from VMware Virtual Center.

3.4 IPMI Baseboard Management Controller

IPMI Baseboard Management Controller (BMC) provides a standard interface for monitoring and managing Dell Servers.

IPMI Baseboard Management Controller is supported in VMware ESX Server.

3.5 Server Update Utility

Server Update Utility helps simplify single server updates with the latest system software features including inventories, reports, and recommendations - and checks for prerequisite conditions.

Server Update Utility is not supported in VMware ESX Server. Use the DOS utilities provided by Dell to perform BIOS and firmware upgrades.

3.6 Server Assistant

Dell Server Assistant includes all necessary tools and the latest drivers to help speed setup, configuration, and optimization of Dell PowerEdge systems and software.

Server Assistant is not supported in VMware ESX Server.

3.7 Deployment Toolkit

Deployment Toolkit helps provide quick and easy configuration of multiple servers from bare metal all the way through OS deployment. It also provides a framework for updating the BIOS.

Deployment Toolkit works independent of the server operating system and hence is independent of VMware ESX Server.

3.8 PowerEdge Service and Diagnostics Utilities

PowerEdge Service and Diagnostics Utilities provide operating system-level diagnostics and software components to detect and resolve hardware issues.

Service and diagnostics utilities are not supported in VMware ESX Server. Perform offline diagnostics by downloading utilities from <http://support.dell.com>.

Refer to section 10 for known issues on the supported OpenManage components.

4. Obtaining Dell OpenManage Software

Acquire Dell OpenManage software from one of the following sources:

4.1 OpenManage Software Kits

Dell servers ship with Dell OpenManage systems management software kits. The software kit contains all the software components described in section 3 including OpenManage Server Administrator. Refer to section 5 for instructions on installing OpenManage on VMware ESX Server software.

4.2 OpenManage Package from support.dell.com

OpenManage systems management software kits can be downloaded from <http://support.dell.com>. Use the following steps to download OpenManage:

1. Go to <http://support.dell.com>
2. Select "Drivers and Downloads"
3. Select the appropriate server model (example: PowerEdge 2950) or enter the Service Tag of the server
4. Click on "Go"
5. Select "Red Hat Enterprise Linux 3"
6. Click on "Find Downloads"
7. Select "Systems Management"
8. Click on "Dell OpenManage Server Administrator Managed Node" to download a tar package for Server Administrator. Select "Dell CD ISO - Installation and Server Management" to download an ISO image of the entire CD-ROM
9. If the version of OpenManage you require is not the latest release, click on "Other Versions" to find previous releases

4.3 Subscribing to OpenManage Updates

To stay updated with the latest OpenManage software releases, enroll in the OpenManage Subscription Service. Visit <http://www.dell.com/openmanage> for more information.

5. Installing OpenManage Server Administrator

This section provides the steps to install the latest supported versions of OpenManage on VMware ESX Server.

5.1 Installing OpenManage 4.5 on ESX 2.5.x

The following are the steps to install OpenManage 4.5 on ESX 2.5.x:

- **NOTICE:** Before installing OpenManage, Dell recommends increasing the size of the Service Console memory by 128MB. This is in addition to the amount of memory already allocated to the Service Console for the number of expected virtual machines.

1. Log on with administrator privileges (root) to the Service Console.
2. Make sure there is at least 512MB of free disk space in the `/root` partition of ESX Server service console. This can be verified by running the `df -lh` command in the service console.
3. Prepare the Service Console for OpenManage installation using the following command:

```
$ omasetup.sh install
```

Insert the ESX Server Installation CD when prompted to do so.

4. After the script completes, use the following steps to install OpenManage Server Administrator:
 - a. If you are using an OpenManage CD, mount the CD and change the working directory with the following commands:

```
$ mount /dev/cdrom /mnt/cdrom
$ cd /mnt/cdrom/srvadmin/linux/supportscripts
```

- b. If you are using a tar file from <http://support.dell.com>, download the file to a temporary directory and extract the files:

```
$ tar -zxvf OMI-SrvAdmin-Dell-Web-LX-450-32-335_A00.tar.gz
```

where `OMI-SrvAdmin-Dell-Web-LX-450-32-335_A00.tar.gz` is the file downloaded from <http://support.dell.com>.

5. Install OpenManage by executing one of the following commands:
 - a. If you are installing OpenManage on a PowerEdge 1855, or on a system that does not have a Dell Remote Access Card (DRAC), use the following command:

```
$ ./srvadmin-install.sh -b -w -s
```

- b. For all other configurations, use the following command:

```
$ ./srvadmin-install.sh -b -w -r -s
```

6. The options used in the OpenManage installation script expand as:

`b`: Base install of OpenManage Server Administrator
`w`: Web interface for OpenManage Server Administrator

r: Dell Remote Access Controller (DRAC) services
s: OpenManage Storage Management (OMSM)

🚫 **NOTICE:** ESX Server Software does not support OpenManage diagnostics. The above command omits diagnostics installation.

7. If you have installed the IT Assistant management application on your network, configure the SNMP daemon to send SNMP trap messages to the management console. Edit `/etc/snmp/snmpd.conf` and add the following line to the end of the file:

```
trapsink <ITA_IP_Address> <community name>
```

8. If you are installing OpenManage on a PowerEdge 1855 system, execute the following commands after completing OM installation:

```
$ chkconfig mptctlnode on  
$ service mptctlnode start
```

9. Unmount and eject the CD with the following command:

```
$ eject
```

5.2 Installing OpenManage 5.0 on ESX 2.5.4

The following are the steps to install OpenManage 5.0 on ESX 2.5.4:

1. Log on with administrator privileges (root) to the Service Console.
2. Make sure there is at least 512MB of free disk space in the `/root` partition of ESX Server service console. This can be verified by running the `df -lh` command in the service console.
3. Use the following steps to install OpenManage Server Administrator:

- a. If you are using an OpenManage CD, mount the CD and change the working directory with the following commands:

```
$ mount /dev/cdrom /mnt/cdrom
```

- b. If you are using a tar file from <http://support.dell.com>, download the file to a temporary directory and extract the files:

```
$ tar -zxvf OMI-50-MN-LX_A01.tar.gz
```

where `OMI-50-MN-LX_A01.tar.gz` is the file downloaded from <http://support.dell.com>.

4. Install OpenManage by executing one of the following commands:

- a. If you are installing OpenManage on a Dell PowerEdge 1855, PowerEdge 1955, or on a system that does not have a Dell Remote Access Card (DRAC), use the following command:

```
$ /usr/sbin/omasetup.sh -5 -b -w -s install
```

- b. For all other configurations, use the following command:

```
$ /usr/sbin/omasetup.sh -5 -b -w -r -s install
```

5. Follow the instructions presented by the installation script. The options used in the OpenManage installation script expand as:

s: Installation of OpenManage 5.0
b: Base install of OpenManage Server Administrator
w: Web interface for OpenManage Server Administrator
r: Dell Remote Access Controller (DRAC) services
s: OpenManage Storage Management (OMSM)

6. If you have installed the IT Assistant management application on your network, configure the SNMP daemon to send SNMP trap messages to the management console. Edit `/etc/snmp/snmpd.conf` and add the following line to the end of the file:

```
trapsink <ITA_IP_Address> <community name>
```

5.3 Installing OpenManage 5.x on ESX 3.0.x

The following are the steps to install OpenManage 5.x on ESX 3.0.x:

1. Log on with administrator privileges (root) to the Service Console.
2. Make sure there is at least 512MB of free disk space in the `/root` partition of ESX Server service console. This can be verified by running the `df -lh` command in the service console.
3. Use the following steps to install OpenManage Server Administrator:
 - a. If you are using an OpenManage CD, mount the CD and change the working directory with the following command:

```
$ mount /dev/cdrom /mnt/cdrom  
$ cd /mnt/cdrom/srvadmin/linux/supportscripts
```

- b. If you are using a tar file from <http://support.dell.com>, download the file to a temporary directory and extract the files:


```
$ tar -zxvf OM_5.1_ManNode_LIN_A00.tar.gz
```

where `OM_5.1_ManNode_LIN_A00.tar.gz` is the file downloaded from <http://support.dell.com>.

4. Install OpenIPMI (version 35.13) by executing the following commands:

```
$ ./srvadmin-openipmi.sh install-force
```

If installing OpenManage 5.0, an error message may be displayed that the installation has failed because another version of OpenIPMI is already installed in the system. The error message may be safely ignored.

 **NOTE:** If installing OpenManage 5.0, use the following additional DKMS command to force the upgrade of OpenIPMI to version 35.13. This step is not required for OpenManage 5.1 and later versions.

```
$ dkms install --force -m openipmi -v 35.13.RHEL3
```

This command will install OpenIPMI using DKMS. Failure to use this command will cause the OpenManage to use the default IPMI present in the service console and may result in slow response from OpenManage and increased boot up time.

5. Install OpenManage by executing one of the following commands:

- a. If you are installing OpenManage on a Dell PowerEdge 1855, PowerEdge 1955, or on a system that does not have a Dell Remote Access Card (DRAC), use the following command:

```
$ ./srvadmin-install.sh -b -w -s
```

- b. For all other configurations, use the following command:

```
$ ./srvadmin-install.sh -b -w -r -s
```

6. Follow the instructions presented by the installation script. The options used in the OpenManage installation script expand as:

b: Base install of OpenManage Server Administrator
w: Web interface for OpenManage Server Administrator
r: Dell Remote Access Controller (DRAC) services
s: OpenManage Storage Management (OMSM)

7. If you have installed the IT Assistant management application on your network, configure the SNMP daemon to send SNMP trap messages to the management console. Edit `/etc/snmp/snmpd.conf` and add the following line to the end of the file:

```
trapsink <ITA_IP_Address> <community name>
```

8. If you are using an OpenManage CD, unmount and eject the CD with the following command:

```
$ eject
```

9. To access the ESX server using an OpenManage Web Administrative console, open the ports used by OpenManage using the following commands:

```
$ esxcfg-firewall -o 1311,tcp,in,OpenManageRequest
```

10. To access the ESX server from IT Assistant and to allow SNMP traps from the server to reach IT Assistant, open the ports used by the SNMP daemon using the following commands:

```
$ esxcfg-firewall -e snmpd
```

6. Upgrading from a Previous Version of OpenManage

If both VMware ESX Server software and OpenManage need to be updated, upgrade ESX Server before upgrading OpenManage. Dell strongly recommends upgrading OpenManage to the latest version supported on your ESX server installation.

6.1 Upgrading to OpenManage 4.5 on ESX 2.5.x

If your system is running Dell OpenManage software older than version 4.3, uninstall the current version before attempting to install the new version. For Dell OpenManage software versions 4.3 and later, upgrade the system using the following commands:

1. Log on with administrator privileges (root) to the Service Console.
2. Use the following steps to upgrade OpenManage Server Administrator:
 - a. If you are using an OpenManage CD, mount the CD and change the working directory with the following commands:

```
$ mount /dev/cdrom /mnt/cdrom
$ cd /mnt/cdrom/srvadmin/linux/supportscripts
```

- b. If you are using a tar file from <http://support.dell.com>, download the file to a temporary directory and extract the files:

```
$ tar -zxvf OMI-SrvAdmin-Dell-Web-LX-450-32-335_A00.tar.gz
```

where OMI-SrvAdmin-Dell-Web-LX-450-32-335_A00.tar.gz is the file downloaded from <http://support.dell.com>.

3. Run the following script and follow the instructions on the screen:

```
$ ./srvadmin-install.sh
```

The script detects previous version of Server Administrator and upgrades the components to the latest version.

6.2 Upgrading to OpenManage 5.0 on ESX 2.5.4

Upgrading to OpenManage 5.0 on ESX 2.5.4 is not supported. Uninstall the older version of OpenManage and use the steps detailed in section 5.2 to install OpenManage 5.0.

6.3 Upgrading to OpenManage 5.x on ESX 3.0.x

1. Log on with administrator privileges (root) to the Service Console.
2. Use the following steps to install OpenManage Server Administrator:
 - a. If you are using an OpenManage CD, mount the CD and change the working directory with the following command:

```
$ mount /dev/cdrom /mnt/cdrom
$ cd /mnt/cdrom/srvadmin/linux/supportscripts
```

- b. If you are using a tar file from <http://support.dell.com>, download the file to a temporary directory and extract the files:

```
$ tar -zxvf OM_5.1_ManNode_LIN_A00.tar.gz
```

where OM_5.1_ManNode_LIN_A00.tar.gz is the file downloaded from <http://support.dell.com>.

3. Install OpenIPMI (version 35.13) by executing the following commands:

```
$ ./srvadmin-openipmi.sh install-force
```

An error message may be displayed that the installation has failed, because of another version of OpenIPMI already installed in the system. The error message may be safely ignored.

NOTE: If upgrading to OpenManage 5.0, use the following additional DKMS command to force the upgrade of OpenIPMI to version 35.13. This step is not required for OpenManage 5.1 and later versions.

```
$ dkms install --force -m openipmi -v 35.13.RHEL3
```

This command will install OpenIPMI using DKMS. Failure to use this command will cause the OpenManage to use the default IPMI present in the service console and may result in slow response from OpenManage and increased boot up time.

4. Upgrade OpenManage by executing the following command:

```
$ ./srvadmin-install.sh
```

The installation script will detect the current version of OpenManage and prompt the user for an upgrade. Follow the on screen instructions to upgrade OpenManage.

7. Using OpenManage in an ESX Server Environment

To start OpenManage services from ESX Service Console, issue the command:

```
$ srvadmin-services.sh start
```

To stop OpenManage services from ESX Service Console, issue the command:

```
$ srvadmin-services.sh stop
```

For information about using OpenManage to manage Dell Servers, refer to the *OpenManage Documentation CD-ROM*, which comes with the Dell Server and also available at <http://www.dell.com/openmanage>.

8. Using IT Assistant in an ESX Server Environment

Dell IT Assistant can be used for basic discovery, monitoring, and management of VMware ESX Servers. No special steps are required for using IT Assistant to monitor an ESX server. For more information on using IT Assistant, refer to *Dell OpenManage IT Assistant: User Guide* at <http://support.dell.com>.

9. Uninstalling OpenManage from ESX Server

To uninstall OpenManage from ESX Server, use the following steps:

1. Log on with administrator privileges (root) to the Service Console.
2. Uninstall OpenManage using the following command:

```
$ srvadmin-uninstall.sh
```

10. Known Issues

Issue	Version	Description	Resolution
<p>In ESX 3.0.x, OM 5.x service takes four minutes to start, during boot-up</p>	<p>OM 5.x on ESX 3.0.x</p>	<p>During boot up, one of the OpenManage services, <code>dsm_sa_datamgr</code>, takes about four minutes to start.</p>	<p>This happens when the incorrect version of OpenIPMI is used in the ESX server. Make sure to update OpenIPMI using the instructions in the installation steps.</p> <p>This issue is also seen when ESX is upgraded from 3.0 to 3.0.1. The upgrade process replaces the OpenIPMI version that is required for OpenManage. To reinstall the correct OpenIPMI version, perform the following steps after upgrading ESX to 3.0.1:</p> <p><i>Stop OpenManage services:</i></p> <pre>\$ srvadmin-services.sh stop</pre> <p><i>Uninstall and reinstall OpenIPMI (version 35.13):</i></p> <pre>\$ dkms uninstall -m openipmi -v 35.13.RHEL3</pre> <pre>\$ dkms install --force -m openipmi -v 35.13.RHEL3</pre> <p><i>Start the OpenManage services:</i></p> <pre>\$ srvadmin-services.sh start</pre>
<p>Unsupported kernel version and non-RAID SCSI driver error message in OpenManage logs</p>	<p>OM 4.5/5.0 on ESX 2.5.x</p>	<p>When OpenManage is installed, the following error message is displayed in the log: "Unsupported kernel version and non-RAID SCSI drivers."</p>	<p>OpenManage Storage Management installation checks for specific versions of Linux® and generates warning messages if an unexpected version is detected. Since the ESX Server service console is a customized version of Linux, OpenManage does not recognize it. The warning messages are harmless and may be safely ignored.</p>

Issue	Version	Description	Resolution
Mouse does not work when using console redirect feature in DRAC 5 on PE6950	OM 5.1.1 on ESX 3.0.1	During and after ESX Server installation on PE6950, the mouse does not work when using console redirect feature in DRAC 5.	This issue will be fixed in a future release of ESX server software. To install ESX using remote console, use text mode or tab key to select install options.
Poor Graphics in remote installation through Console Redirect in DRAC 4	OM 4.5/5.0 on ESX 2.5.x/3.0.x	When ESX Server is installed using Console Redirect in DRAC 4, the installation has poor graphics display.	When using DRAC Console Redirect function, switch to the text based ESX Server installation interface. This is done by typing "text" in the installation options menu.
Unable to use remote floppy disk and CD-ROM in VM's using DRAC Remote media	OM 4.5/5.0 on ESX 2.5.x/3.0.x	When using DRAC 4, remote media like floppy disks and CD-ROMs can be mounted by the Service Console but they cannot be accessed by VM's. When using Avocent Digital KVM Access Module in PE 1855, remote floppy media cannot be accessed by VM's.	Accessing remote floppy disks and CD-ROMs from VM's is not supported. Only devices directly connected to an ESX server or a floppy or CD-ROM ISO image present in the ESX Service Console can be made accessible to the VM's. Avoid this issue by creating an image of the floppy or CD-ROM and copying it to the Service Console.
Unable to delete virtual RAID disks using OpenManage Storage Management	OM 4.5/5.0 on ESX 2.5.x/3.0.x	When virtual RAID disks are deleted using OpenManage Storage Management, the operation fails and reports the following error "Delete virtual disk failed."	Creating and deleting virtual RAID disks through OpenManage Storage Management is not supported. To create and delete RAID disks, use the boot menu of the PERC controller.
Newly created RAID Virtual Disks using OpenManage Storage Management (OMSM) map to the same device name	OM 4.5/5.0 on ESX 2.5.x	All newly created RAID virtual disks using OpenManage Storage Management map to /dev/sda.	Creating and deleting virtual RAID disks through OMSM is not supported. To create and delete RAID disks, use the boot menu of the PERC controller.
OpenManage diagnostics are not available when OpenManage is installed in ESX	OM 4.5/5.0 on ESX 2.5.x/3.0.x	After OpenManage is installed, online diagnostics are not available and cannot be performed.	Online diagnostics are not supported in ESX. Offline diagnostics must be used. When installing OM on ESX, do not install the diagnostics portion.

Issue	Version	Description	Resolution
<p>Both the OpenManage web interface and CLI do not report all NIC information. IP address is reported as “[Not Obtained].”</p>	<p>OM 4.5/5.0 on ESX 2.5.x/3.0.x</p>	<p>This issue is manifested differently depending on the OM and ESX versions.</p> <p>With OM 4.5 on ESX 2.5.x, OM does not report connectivity status, IP address, and MAC address for the NIC's dedicated to Virtual Machines.</p> <p>With OM 5.0 on ESX 2.5.4, OM does not report IP address and MAC address for the NIC's dedicated to Virtual Machines.</p> <p>With OM 5.x on ESX 3.0.1, OM does not report IP address for all NIC's in VMware ESX Server.</p>	<p>This is a known issue. ESX 2.5.x reports information correctly for the NIC dedicated to service console.</p> <p>In ESX 3.0, all physical NIC's are dedicated to VMkernel. The service console uses a virtual NIC. OpenManage reports information about the physical hardware. Since IP addresses are tied to virtual NIC's in ESX 3.0, OpenManage will not report this information. MAC address and connectivity status of the physical NIC's are reported.</p>
<p>OpenManage incorrectly reports total memory available to the Operating System</p>	<p>OM 4.5/5.0 on ESX 2.5.x/3.0.x</p>	<p>OpenManage is installed on the service console. It only reports the total memory available to the service console. It does not report the memory available for the virtual machines.</p>	<p>Total installed Capacity represents the memory available to the ESX Server, including the virtual machines and the service console.</p>
<p>Remote shutdown option using <code>ipmish</code> through BMC does not gracefully shutdown the ESX Server</p>	<p>OM 4.5/5.0 on ESX 2.5.x/3.0.x</p>	<p>When a remote shutdown command is issued through BMC using the <code>ipmsh</code> command, the ESX server does a hard shutdown instead of a graceful shutdown.</p>	<p>This is a known issue. To do a graceful shutdown on VMware ESX Server, use the remote shutdown option using DRAC or use Virtual Center/Infrastructure client.</p>
<p>ESX Server software installation deletes the Utility Partition in the Dell Servers</p>	<p>OM 4.5/5.0 on ESX 2.5.x/3.0.x</p>	<p>When ESX Server is installed, it deletes the Utility Partition that ships with the Dell Servers</p>	<p>Utility Partition is not supported in VMware ESX Server. Utility Partition is used to run diagnostics on the server. Diagnostics can be downloaded from support.dell.com and are available in the OpenManage software kits.</p>

Issue	Version	Description	Resolution
Remote shutdown option using DRAC does not gracefully shutdown the ESX server on Dell blades and Dell 9G servers	OM 4.5/5.0 on ESX 2.5.x/3.0.x	When a remote shutdown command is issued through DRAC, the ESX server does a hard shutdown instead of a graceful shutdown.	This is a known issue. Use VirtualCenter to do a graceful shutdown of VMware ESX Server.
I/O errors are seen in VMware log files when detaching a remote floppy using DRAC 5	OM 4.5/5.0 on ESX 2.5.x/3.0.x	When a remote floppy is attached through a DRAC 5 to the service console and then detached, I/O errors are seen in <code>/var/log/messages</code>	This is a known issue. VMware maps the remote media to a SCSI device and logs errors when the remote floppy is removed. This message can safely be ignored. To stop the messages from reappearing, detach the remote media and restart the server.
Virtual floppy I/O errors in <code>/var/log/messages</code> after system boot up	OM 5.x on ESX 2.5.4/3.0.x	After system boot up, <code>/var/log/messages</code> reports the following error "end_request: I/O error, dev 21:00 (hde), sector 2", where hde is device for the remote media. On PE6950 the errors look like: kernel: sdb : READ CAPACITY failed. kernel: Current sd00:00: sense key Not Ready kernel: Additional sense indicates Medium not present kernel: sdb: I/O error: dev 08:10, sector 0 kernel: unable to read partition table	The errors do not represent actual functionality loss. The errors can be ignored. This issue will be fixed in future release of ESX server software.
OpenManage Storage Management (OMSM) reports an error on creating virtual RAID disks	OM 5.x on ESX 3.0.x	When virtual RAID disks are created using OMSM, the operation fails and reports the following error " <i>The create Virtual Disk task was successful but the operating system may not be aware of the new virtual disk.</i> "	Creating and deleting virtual RAID disks through OpenManage Storage Management is not supported with ESX 3.0.x. To create and delete RAID disks, use the boot menu of the PERC controller.

11. Troubleshooting

Issue	Version	Description	Resolution
OpenManage installation fails with failed dependencies	OM 4.5 on ESX 2.5.x	OpenManage installation fails with the error: "Error failed dependencies: unzip is needed by srvadmin-omacore.4.x.0-xxx"	Make sure that all the installation instructions in this document are followed. This error message is displayed when <code>omasetup.sh install</code> command is omitted during installation.
Unable to access OpenManage web interface	OM 5.x on ESX 3.0.x	OpenManage Web interface cannot be accessed using Web browser.	Make sure that the VMware ESX firewall is configured to allow OpenManage web access using the following commands: <code>esxcfg-firewall -o 1311,tcp,in,OpenManageRequest</code>
Device details in ITA are incomplete for ESX 3.0 servers	OM 5.x on ESX 3.0.x	ITA collects information through SNMP. Some of the server device information on an ESX server is not available through the ITA inventory. The information appears either blank or unknown. This happens when SNMP queries timeout.	This happens when an incorrect version of OpenIPMI is used in the ESX server. Make sure OpenIPMI is updated using the instructions in the installation steps.
ESX 3.0: Virtual CD-ROM shown as /dev/hdN instead of /dev/cdrom1	OM 5.x on ESX 3.0.x	ESX Server maps the virtual CD-ROM from DRAC to /dev/hdN instead of /dev/cdrom1.	To use the DRAC CD-ROM, use <code>dmesg</code> command or browse <code>/var/log/messages</code> to find out where the DRAC CD-ROM is mounted.
OpenManage upgrade from 4.x to 5.0 fails	OM 5.x on ESX 2.5.4/3.0.x	OpenManage upgrade from version 4.x to 5.0 fails with the error message: error: Failed dependencies: <code>openipmi >= 35.12 is needed by srvadmin-ipmi-5.0.0-434.rhel3</code>	This happens when you attempt to upgrade OpenManage without upgrading the OpenIPMI. Follow the steps in section 6, to perform an upgrade.

Issue	Version	Description	Resolution
<p>When installing OpenManage using omasetup.sh command the following error is displayed "-bash: omasetup.sh: command not found"</p>	<p>OM 5.x on ESX 3.0.x</p>	<p>When omasetup.sh command is used to install OpenManage, the installation fails with the error: -bash: omasetup.sh: command not found</p>	<p>omasetup.sh command is not required to install OpenManage on ESX 3.0.x. OpenManage can be directly installed with the standard installation scripts provided in the OpenManage CD-ROM.</p>
<p>SNMP Traps from Virtual Center are not displayed properly in IT Assistant</p>	<p>OM 4.5/5.0 on ESX 2.5.x/3.0.x</p>	<p>SNMP traps from VirtualCenter are displayed as "Undefined" with no status information.</p>	<p>This is working as designed. IT Assistant currently does not have VMware MIB's.</p>

12. Reference

The following documents are available in the *Support Documents* and *Resource Archive* sections at <http://www.dell.com/vmware>:

- VMware Virtual Infrastructure 3.0.1 for Dell PowerEdge Servers - Release Notes
- VMware Software Compatibility Matrix for Dell servers and Dell|EMC storage
- Remote Installation of VMware ESX Server Software Using Dell Remote Access Controller
- Console Redirection on VMware ESX Server Software and PowerEdge Servers

Other references:

- Dynamic Kernel Module Support (DKMS) at <http://linux.dell.com/projects.shtml>
- OpenIPMI at <http://www.openipmi.org> and <http://openipmi.sourceforge.net>