VMware vSphere 4.x On Dell PowerEdge Systems

Release Notes

Notes and Cautions

NOTE: A NOTE indicates important information that helps you make better use of your computer.

CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.

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Overview

This document contains important information about VMware ESX 4.*x* and VMware ESXi 4.*x* running on Dell PowerEdge systems. This document is an addendum to the ESX and ESXi deployment guides available at **support.dell.com/manuals**.

NOTE: To install the Dell OpenManage software on PowerEdge systems running ESX/ESXi, and for related known issues and troubleshooting steps, see the relevant documentation at **support.dell.com/manuals**.

The known issues for ESX and ESXi running on PowerEdge systems are listed below. For more information, click the issue.

- Upgrade from ESXi 3.5 to ESXi 4.x fails.
- The PERC H310 Mini controller is displayed as MegaRAID SAS SKINNY controller in the Storage Adapter section in the vCenter Server and the ESXi shell.
- ESX host may fail to boot or become unresponsive during boot.
- Installer screen is misaligned during ESX installation.
- BIOS Revision string displays incorrectly on ESXi installation failure screen.
- Power Management settings are displayed as Not supported and Not applicable.
- Errors related to EqualLogic Multipathing Extension Module (MEM) are seen.
- ESX boot log displays an error.
- SATA CD drive running in AHCI mode does not recognize the ESX driver media.
- IPv6 performance issues with ESX.
- System reboots intermittently when DMA Virtualization is enabled in BIOS.
- VMDirect Path I/O behaves abnormally on AMD systems configured with more than 256 GB of memory.
- Upgrade from ESXi 3.5 Update 5 to ESXi 4.0 Update 3 fails.
- ESXi takes more time to complete bootup and perform different tasks.
- Removal of USB storage device creates dead entries in Service Console (COS).
- The Dell PowerVault MD36xxi storage array configured with VMware ESX fails.
- ESX 4.x logs INTERNAL ERROR messages related to the SATA CD/DVD ROM present in the system.

- A system running ESX 4.x and installed with the driver for the Emulex CNA card (card number OCE10102-FX-D) crashes, if the SFP cable connected to the card is removed.
- ESXi reports an incorrect MAC address for PowerEdge M-Series modular systems enabled with FlexAddress.
- The network connection to one of the 10G ports may drop.
- ESXi fails to reboot from the OpenManage BIOS setup page.
- Error messages related to SFCB are displayed on ESX Service Console.
- System hangs during reboot when ESX is deployed through PXE environment.
- Symbolic link warning messages are displayed on ESX service console.
- If you make licensing changes using vSphere Client and then reboot ESXi, the changes are lost.
- ESX 4.x stops responding with a Purple Screen on the Intel Xeon 3400 series processor-based systems.
- ESX 4.x fails to boot and may drop into the recovery shell when you replace the storage controller or import foreign configuration.
- ESX installation on a Dell PowerEdge R815 system stops responding.
- iDRAC vKVM input devices fail to function on Dell PowerEdge R815 systems.
- VMware VMotion without Enhanced VMotion Compatibility (EVC) enabled fails on AMD Opteron 61xx and 41xx series processors.
- ESX has performance issues because of interrupt request (IRQ) sharing.
- The Windows Server 2008 operating system cannot be automatically pre-activated on VMs.
- One or more uplink adapters (physical network adapter) may stop functioning on heavy network stress.
- ESX 4.0 Update 1 fails to start after the installation of QLogic CNA drivers.
- The target name of iSCSI LUNs may not be displayed in VMware vSphere Server/VI Client.
- Incorrect devices are classified under the Processor section in the Hardware Status tab of the VMware vSphere Server.
- RAID 10 virtual disks are displayed as RAID 1 in VMware vSphere Server/ VI Client.
- In Critical Array, the sensor is not asserted in VMware vSphere Server/ VI Client.

- When you install ESX 4.0 on a PowerEdge T310 system with Intel Core i3 5xx processor, the 80.Iommu script fails to execute.
- Unknown entries are displayed when the lspci command is executed.
- The iDRAC communication stops when ESX loads network drivers.
- ESXi 4.0 (Embedded edition) installation fails.
- VMware vCenter Server does not display the correct network performance details.
- When the storage controller battery is in the learning mode, VMware vSphere Server displays the following message: `I2C error detected.`
- On a Non-Uniform Memory Access (NUMA) enabled system, ESX/ESXi may fail to install or boot because of unbalanced memory distribution across the nodes.
- The PowerEdge 6850 service console displays the following message: `Can't boot system as genuine NUMA.`
- If a USB optical drive or an iDRAC virtual CD drive is connected to an ESX/ESXi host after the system completes boot, the device may not be available to the VMs.
- The contents of the PowerEdge RAID Controller (PERC) or Cost-Effective RAID Controller (CERC) cache are not flushed to the disk during a graceful shutdown of ESX/ESXi 4.0.
- Internet SCSI (iSCSI) storage volumes configured with ESX/ESXi may be lost when the active storage controller fails and failover occurs.
- The PERC 6/i Integrated device name is displayed incorrectly as `MegaRAID SAS1078R`.
- VMware vSphere Server or VMware vSphere Client displays the USB storage controller on an ESX/ESXi system as `No Name provided vmhba#`.
- VMware vSphere Server or VMware vSphere Client displays the Service Tag of a blade enclosure instead of the Service Tag of the blade itself.
- When you run the lspci command on the service console, the PERC 4/DC device name is displayed incorrectly as `MegaRAID`.
- The ESX service console displays error messages related to the Small Computer System Interface (SCSI) on some PowerEdge systems.
- The DRAC 4 adapter is displayed as `unknown` in the service console of ESX.

- When you unplug the power cord from the PowerEdge R410 and PowerEdge T410 systems, the VMware vSphere Server health status page displays a green status for the power supply and also displays the power rating.
- Running the vihostupdate command from the vSphere CLI fails.
- vSphere Client displays invalid values for hardware information of the Double-Data-Rate 3 (DDR3) and Dual in-line Memory Module (DIMM).
- Service console becomes inaccessible on upgrading to ESX 4.0 from ESX 2.5.5.
- For some Ethernet network cards, the Direct Console User Interface (DCUI) displays the Hardware Label as `N/A`.
- Upgrading from ESXi 3.5 Update 4 to ESXi 4.0 may fail on some systems.
- Network adapter description displayed in VMware vSphere Server is not correct.
- The device enumeration order displayed in ESXi 4.0 Installable may differ from that displayed by the storage controller.

Known Issues and Resolutions

Issue	Description	Resolution	Applies to
Upgrade from ESXi 3.5 to ESXi 4.x fails.	Upgrade from ESXi 3.5 to ESXi 4.x hangs, if the storage device contained GUID Partition Table (GPT) partitions prior to installing ESXi 3.5.	To resolve this issue, format the storage device and change the partition table to **MS-DOS** using the command `parted`, prior to installing ESXi 3.5.	ESXi 4.x
The PowerEdge RAID Controller (PERC) H310 Mini controller is displayed as **MegaRAID SAS SKINNY** controller.	The PERC H310 Mini controller is displayed as **MegaRAID SAS SKINNY** controller in the **Storage Adapter** section in the vCenter Server and the ESXi shell.	This issue occurs due to an incorrect name provided in the **pci.ids** file for PERC H310.	ESXi 4.1.x
ESX host may fail to boot or become unresponsive during boot.	An ESX 4.1 Update 2 host installed with **megaraid_sas** devices may fail to boot or become unresponsive during boot. Error messages related to resetting the storage controller may be displayed.	This issue is resolved in the **megaraid_sas** driver version **00.00.05.33**.	ESX 4.1 Update 2
Installer screen is misaligned during ESX installation.	Screen resolution is improper during ESX installation.	There is no functionality loss. ESX installation can still be performed using this screen.	ESX 4.1 Update 2
BIOS Revision string displays incorrectly on ESXi installation failure screen.	BIOS Revision string displays the vendor name instead of the BIOS revision, when ESXi installation fails.	This is a known issue.	ESXi 4.x

Issue	Description	Resolution	Applies to
Power Management settings are displayed as **Not supported** and **Not applicable.**	In systems with AMD Opteron 6200 and AMD Opteron 4200 Series processors, **Power Management** settings in vCenter is displayed as **Not supported** and **Not applicable**.	This is a known issue.	ESX/ESXi 4.1 Update 2
Errors related to EqualLogic Multipathing Extension Module (MEM) are seen.	The error message `EnumerateAssociationsFault` is seen when parameters of EqualLogic MEM are changed or viewed from the ESX CLI command line utility.	To resolve this issue: 1 Increase **ulimit** value to 1024 using the command: `ulimit -n 1024` 2 Change **provProcs** value from 16 to 12 in **/etc/sfcb/sfcb.cfg** 3 Restart **sfcbd** for the changes to take effect using the command: `/etc/init.d/sfcbd-watchdog restart` **NOTE:** These settings are not persistent across reboots.	Dell customized VMware ESXi 4.1 Update1 A05
ESX boot log displays an error.	The ESX bootup log file **esxcfg-boot.log** shows the error message `/etc/vmware/simple.map is missing`	There is no functionality loss due to this message. You can ignore the error message.	ESX 4.x
SATA CD drive running in AHCI mode does not recognize the ESX driver media.	With AHCI mode set for SATA CD/DVD drive, the ESX installer does not recognize the ESX driver media inserted during installation of ESX.	To work around the issue, set the mode of the SATA CD/DVD drive as **ATA** in the BIOS before you start the ESX installation.	ESX 4.1.x

Issue	Description	Resolution	Applies to
IPv6 performance issues with ESX.	Intel 1 Gbps NIC may provide maximum network throughput of ~500 Mbps when IPv6 addressing is enabled for the host and guest NIC interfaces.	This is a known issue.	ESX/ESXi 4.x
System reboots intermittently when **DMA Virtualization** is enabled in BIOS.	System reboots intermittently on some AMD platforms when **DMA Virtualization** is enabled in BIOS.	Update to latest BIOS available at **support.dell.com.**	ESX/ESXi 4.x

Issue	Description	Resolution	Applies to
VMDirect Path I/O behaves abnormally on AMD systems configured with more than 256 GB of memory.	On AMD systems configured with more than 256 GB of memory, the VMDirect Path I/O feature fails. Such systems running virtual machines (VM) configured with a pass-through device do not boot. For example, a system running Microsoft Windows 2003 64-bit Standard Edition displays a Blue Screen immediately after you install the driver for the BCM 57711/BCM57710 card attached to the VM as a pass-through device. This issue is due to the limitation of the module **AMDIommu** in ESXi 4.*x*. **AMDIommu** fails to create the required heap during its initialization. **AMDIommu**-related Heap error messages are logged in the vmkernel.	This is resolved in ESX/ESXi 4.1 Update 2. For resolution, see **kb.vmware.com/kb/2000963**	ESX/ESXi 4.*x*

Issue	Description	Resolution	Applies to
Upgrade from ESXi 3.5 Update 5 to ESXi 4.0 Update 3 fails.	ESXi upgrade from 3.5 Update5 to ESXi 4.0 Update3 fails. When you use VI Host Upgrade utility for upgrade, the following error message is displayed: `The Upgrade has failed. Click View Log...for more details. Unexpected return status:5` When you use VMware Update Manager utility, the upgrade progress is shown as ~44% and times out after a long time.	For resolution, see **kb.vmware.com/kb/2000407**	ESXi 4.*x* Embedded Edition
ESXi takes more time to complete bootup and perform different tasks.	The boot up time of ESXi is increased if the number of processor cores per socket enabled is eight or more. Similarly, some of the tasks such as adding the hosts to HA Cluster, take more time in systems in which eight or more cores per socket have been enabled.	For resolution, see **kb.vmware.com/kb/2006081**	ESXi4.*x*

Issue	Description	Resolution	Applies to
Removal of USB storage device creates dead entries in Service Console (COS).	Removing a USB storage device creates a dead entry in the COS SCSI subsystem. The `esxcfg-mpath -l` command displays the dead entries information in ESX.	To remove the dead entries from the COS, run the command `esxcfg-rescan -d <vmhba>` where vmhba is the adapter name of the dead entry. `esxcfg-mpath -l` lists all the devices present in the system and the state of each device.	ESX 4.0.*x*
The Dell PowerVault MD3600*xx*i storage array configured with VMware ESX fails.	PowerVault MD3600*xx*i storage array is not detected or does not function properly with ESX.	Use one of the following options to resolve the issue: • Use the latest Dell-customized ESXi 4.1 Update 1 image with inbuilt support for this array available on **support.dell.com**. • When using ESX images, run the following command from vSphere command line interface (vCLI) to add the claim rule:	ESX/ESXi 4.1 Update 1

Issue	Description	Resolution	Applies to
		`esxcli.exe --server <ESX/ESXi IPAddress> --username root --password <ESX/ESXi root user password> nmp satp addrule -V DELL -M MD36xxi -s VMW_SATP_LSI --description "Dell MD36xxi"` where **esxcli.exe** is the executable file installed on a Windows system as part of vCLI package installation.	
ESX 4.x logs INTERNAL ERROR messages related to the SATA CD/DVD ROM present in the system.	On the Dell PowerEdge R815, R715, R515, and R415 systems, log files are flooded by SATA linkup and Exception Emask SErr messages.	The INTERNAL ERROR messages are from the SATA controller used in the system. This is a known hardware issue for SB600/700/800 ATI SATA controllers. The messages can be safely ignored.	ESX/ESXi 4.x

Issue	Description	Resolution	Applies to
		For stopping the error messages logged into the log file, use one of the following workarounds: • Ensure a media is always present in the SATA CD/DVD drive. This workaround avoids exception messages being sent to the log files. • Reduce the level of event logging by adding strings in **/etc/vmware/logfilters**. For more information, see **kb.vmware.com/kb/1004499**.	
A system running ESX 4.x crashes with a Purple screen when the SFP cable is detached from the Emulex CNA card.	A system running ESX 4.x and installed with the driver for the Emulex CNA card (card number OCE10102-FX-D) crashes, if the SFP cable connected to the card is removed.	Upgrade the Emulex card firmware revision to 2.103.269.2818 or the higher version available.	ESX/ESXi 4.x
ESXi reports an incorrect MAC address for PowerEdge M-Series modular systems enabled with FlexAddress.	An incorrect MAC address is set for ESXi Management Network Portgroup (vmk0) when FlexAddress is enabled on PowerEdge M-Series modular systems.	To resolve the issue: **1** Run the following command: `esxcfg-advcfg -s 1 /Net/FollowHardwareMac` in the troubleshooting console (Tech Support Mode). **2** Restart the server. For more information, see **kb.vmware.com/kb/1031111**.	ESXi 4.0.*x* and 4.*x*

Issue	Description	Resolution	Applies to
The network connection to one of the 10G ports may drop.	When a 10G network card is connected as a pass-through device to a virtual machine (VM), with Windows Server 2003 Standard (x64) Edition guest operating system installed, the network connection to one of the 10G ports may drop. This issue occurs when you use the network driver version v15.5.	To work around the issue, perform one of the following procedures: • Renew the IP address of the VM by running the command, `ipconfig/renew` in the command prompt. • Downgrade the driver to v14.0 available at **downloadcenter.intel.com.**	ESX/ESXi 4.0.*x*
ESXi fails to reboot from the OpenManage *BIOS setup* page.	Rebooting an ESXi host through the system management tool using a standalone VMware license may fail. Rebooting from the service console or using other VMware licensing does not cause this issue. For example, using ESXi 4.0 with a VMware Enterprise license key does not prevent you from rebooting the ESXi host.	You can use an enterprise license key to resolve the issue. For more information, see **kb.vmware.com/kb/1026060**.	ESXi 4.0.*x*

Issue	Description	Resolution	Applies to
Error messages related to SFCB are displayed on ESX Service Console.	When using Dell Distributed Web Server (DWS) for ESX Server Management, you may encounter error messages related to SFCB in the Service Console such as: `ioctl32 (sfcb-dcim: Unknown cmd...)`	The issue is in ESX due to an incorrect library path. Ignore the SFCB related error messages as there is no loss of functionality.	ESX 4.0.*x*
System hangs during reboot when ESX is deployed through PXE environment.	When you begin the ESX installation using the **Kickstart (KS)** file, the installation hangs during the final stage of reboot. When you press <Enter> to reboot, the system does not respond.	This issue occurs with the older DHCP Server version. To work around the issue, perform one of the following procedures: • Press <ALT><F2> and execute the **reboot** command from the shell. • Upgrade the DHCP Server to a version greater than 3.0.5-21.el5.	ESX 4.0 Update 2

Symbolic link warning messages are displayed on ESX service console.	When the command **ldconfig** is executed on ESX, symbolic link warning messages are displayed on the service console as shown below:
	`ldconfig: /usr/lib/libkrb4.so.2 is not a symbolic link`
	`ldconfig: /usr/lib64/libkrb4.so.2 is not a symbolic link`
		The error messages are due to changes in the RPM structure on ESX. You can ignore the error messages as they do not cause any loss of functionality.	ESX 4.1

Issue	Description	Resolution	Applies to
If you make licensing changes using vSphere Client and then reboot ESXi, the changes are lost.	When you update the ESXi host to an evaluation license or to a different license using vSphere Client and then reboot the ESXi host, the updates are lost. This issue does not occur if you make licensing changes using VMware vSphere Server. **NOTE:** This error is observed only on the pre-licensed OEM-customized ESXi images.	To work around this issue, perform one of the following procedures: • Upgrade the ESXi image to the Dell-customized image from **support.dell.com**. **CAUTION: Performing the following step removes the OEM installed license VIB. It is recommended that you save the OEM license key of VIB before performing the step.** • Uninstall the OEM-installed license VIB package using the VMware vSphere CLI by running the following command: `Vihostupdate.pl --server server name --username user name --password password --bulletin cross_oem-dell-he-esxi-license_4.0-0 --remove` where, *cross_oem-dell-he-esxi-license_4.0-0* is the OEM license VIB name that is available with the Dell-customized image. Reboot the system and update the license key using either vSphere Client or VMware vSphere Server.	ESXi 4.*x*

Issue	Description	Resolution	Applies to
ESX 4.x stops responding with a Purple Screen on the Intel Xeon 3400 series processor-based systems.	ESX 4.x running on Xeon 3400 series processor-based systems such as PowerEdge T110, R210, T310, and R310 may stop responding with a Purple screen. This occurs when the **Power Management** option of the system BIOS is set to **Active Power Controller**.	To resolve this issue, download and apply the following minimum BIOS versions from **support.dell.com**: • BIOS 1.3.4 for PowerEdge T110 system • BIOS 1.3.4 for PowerEdge R210 system • BIOS 1.3.6 for PowerEdge T310 system • BIOS 1.1.5 for PowerEdge R310 system	ESX/ESXi 4.0 Update 1 or later
ESX 4.x fails to boot and may drop into the recovery shell when you replace the storage controller or import foreign configuration.	This issue occurs when there is a change either to the disk/LUN on which ESX is installed, or to the controller connecting the disk/LUN on which ESX is installed. This happens when the Virtual Machine File System (VMFS) datastore that contains the Service Console's virtual disk file is detected as a snapshot LUN.	To resolve this issue, resignature the VMFS datastore. For more information, see **kb.vmware.com/kb/1012142**	ESX 4.0.*x*

Issue	Description	Resolution	Applies to
ESX installation on a Dell PowerEdge R815 system stops responding.	During ESX installation on a PowerEdge R815 system, the keyboard/mouse may not function if connected to the top USB port on the back panel of the system. The failure of the input device might be misinterpreted as system hang during ESX installation.	To resolve this issue, perform one of the following procedures: • Do not use the top USB port on the back panel of the system during ESX installation. • Use iDRAC vKVM for ESX installation.	ESX/ESXi 4.0 Update 1
iDRAC vKVM input devices fail to function on Dell PowerEdge R815 systems.	When you boot a PowerEdge R815 system, the iDRAC vKVM input devices may stop functioning.	To resolve this issue, apply the VMware patch **ESX400-201003001/ ESXi400-201003001** to ESX/ESXi respectively.	ESX/ESXi 4.0 Update 1

Issue	Description	Resolution	Applies to
VMware VMotion without Enhanced VMotion Compatibility (EVC) enabled fails on AMD Opteron 61*xx* and 41*xx* series processors.	When EVC is not enabled, vMotion fails if you attempt to migrate a virtual machine between older 3rd generation Opteron 13*xx*, 23*xx*, 83*xx*, 14*xx*, 24*xx*, 84*xx* series processors and the newer 3rd generation Opteron 61*xx* and 41*xx* series processors. The **Migrate Virtual Machine** wizard displays the following error message: `Host CPU is incompatible with the virtual machine's requirements at CPUID level...` and the virtual machine remains on the host of origin.	To work around this issue, see **kb.vmware.com/kb/1020958**.	ESX/ESXi 4.0 Update 1

Issue	Description	Resolution	Applies to
ESX has performance issues because of interrupt request (IRQ) sharing.	When the system initializes, VMkernel assigns IRQ numbers to all PCI devices based on the system's hardware topology and the number of available IRQs. If the number of available IRQs are limited due to hardware constraints, two or more PCI devices may be assigned the same IRQ number. In isolated cases, IRQ sharing may significantly impact ESX Server performance.	To resolve this issue, see **kb.vmware.com/kb/1003710**	ESX/ESXi 4.0.*x*
The Windows Server 2008 operating system cannot be automatically pre-activated on VMs.	When you install the Microsoft Windows Server 2008 operating system on VMs using the Dell Original Equipment Manufacturer (OEM) installation media, the operating system stops working. This issue occurs because the VMs running on the Dell system do not automatically pre-activate the Windows Server 2008 operating system.	You must use a virtual key to activate the Windows Server 2008 operating system. For more information, see the white paper, *Dell OEM Windows Server 2008 Installation on Virtual Machines Using Dell OEM Media* at **dell.com**.	ESX/ESXi 4.*x*

Issue	Description	Resolution	Applies to
One or more uplink adapters (physical network adapter) may stop functioning on heavy network stress.	On heavy network stress, one or more uplink adapters (physical network adapter) may stop functioning, leading to communication failure between the corresponding Port Group(s) and the external network. This may result in failure of the VM, VMkernel, or Management Network traffic.	This issue is fixed with patch **ESX400-201002001/ESXi400-201002001**. For more information, see **kb.vmware.com/kb/1017465** or **kb.vmware.com/kb/1017458**	ESX/ESXi 4.*x*
ESX 4.0 Update 1 fails to start after the installation of QLogic CNA drivers.	On systems with 256 GB memory or more, ESX boots into recovery shell or encounters PSOD. This occurs because the drivers required for system bootup fail to load due to insufficient memory.	To resolve this issue, see **kb.vmware.com/kb/1016239**	ESX 4.0.*x*
The target name of iSCSI LUNs may not be displayed in VMware vSphere Server/VI Client.	When an iSCSI target LUN is connected to ESX/ESXi, the target name of iSCSI LUNs may not be displayed in the VMware vSphere Server/ VI Client.	To resolve this issue, see **kb.vmware.com/kb/1020775**	ESX/ESXi 4.0.*x*

Issue	Description	Resolution	Applies to
Incorrect devices are classified under the **Processor** section in the **Hardware Status** tab of the VMware vSphere Server.	Devices like vFlash, disk-drive bays, internal dual SD module (IDSM) and so on, may be displayed in the **Processor** tab of the **Hardware Health Status** page of the VMware vSphere Server.	This is a cosmetic issue. There is no loss of functionality.	ESX/ESXi 4.0.*x*
RAID 10 virtual disks are displayed as RAID 1 in VMware vSphere Server/ VI Client.	RAID 10 configured in H200 controller is reported as RAID 1 in VMware vSphere Server/ VI Client.	This is a cosmetic issue. There is no loss of functionality.	ESX/ESXi 4.0.*x*
In **Critical Array**, the sensor is not asserted in VMware vSphere Server/ VI Client.	In the VMware vSphere Server **Hardware Health Status** page, in **Critical Array**, the sensor is not asserted for the drives which are part of the degraded array. The issue arises because the Storage Controller firmware of SAS IR/H200 controllers do not assert the sensor.	There is no loss of functionality.	ESX/ESXi 4.0.*x*

Issue	Description	Resolution	Applies to
When you install ESX 4.0 on a PowerEdge T310 system with Intel Core i3 5*xx* processor, the **80.Iommu** script fails to execute.	Though the processor does not support Intel VT-D feature, the system BIOS exposes DMA Remapping (DMAR) in the ACPI tables. ESX reads the ACPI tables and fails to load the VT-D kernel module. The following warning message is displayed: `80.Iommu script failed to execute`.	This warning message can be ignored as there is no loss of functionality.	ESX/ESXi 4.0 Update 1
Unknown entries are displayed when the **lspci** command is executed.	When you execute the **lspci** command, a number of unknown entries are listed as device descriptions for devices such as host PCI-PCI bridge, USB controllers, and so on.	The unknown entries can be ignored. Though the PCI bridge, USB controllers, and other devices are shown as unknown, all functionalities are available. The unknown entries are present as the **pci.ids** file in ESX, which is not up to date.	ESX 4.0.*x*

Issue	Description	Resolution	Applies to
The iDRAC communication stops when ESX loads network drivers.	The communication to iDRAC stops when the ESX NIC driver loads under the following conditions: • The iDRAC NIC interface is in shared mode with the on-board NIC. • A VLAN ID is set for the iDRAC network interface. However, iDRAC responds until the ESX/ESXi boot up process begins the **Loading Network Drivers** phase.	The issue occurs because the ESX NIC driver (**bnx2**) cannot handle the VLAN ID specified in the iDRAC NIC. **NOTE:** To resolve this issue, do not use VLAN tagging for iDRAC in shared mode; instead, use the asynchronous driver available at the VMware website. For more information, see **kb.vmware.com/kb/1019513**.	ESX/ESXi 4.0.*x*
ESXi 4.0 (Embedded edition) installation fails.	ESXi 4.0 installation fails and the following error message is displayed: `Fatal Error: More than one USB device found. Please remove USB devices other than the USB key/SD card where you wanted to install ESXi.` The issue arises when Unified Server Configurator (USC) is used for the operating system deployment and ESXi installation has started on the server.	To resolve the issue: 1 If any additional USB flash device is present on the system, remove it. 2 Upgrade the ESXi image to the Dell-customized ESXi 4.0 Update 1 image from **support.dell.com**, if: • The iDRAC firmware is later than or equal to version 1.30. • You can view the boot device **LCDRIVE** when the system boots up.	ESXi 4.0/ ESXi 4.0 Update 1 Embedded edition

Issue	Description	Resolution	Applies to
		3 If you cannot upgrade the ESXi image, downgrade the iDRAC firmware to a version earlier than 1.30. During server boot, press <F10> to get the USC screen, or disconnect the power cord and then reconnect. Or, wait for 18 hours and start ESXi installation. This disables the USB device exposed by USC.	
VMware vCenter Server does not display the correct network performance details.	vCenter Server does not display the correct network performance details because vCenter Server is unable to read data from the ESX/ESXi host.	Use the **esxtop** command on the ESX host to view the correct network performance details. Use the **resxtop** command available in VMware vSphere CLI to get the resource usage details of ESX/ESXi remotely.	ESX/ESXi 4.0.*x*
When the storage controller battery is in the learning mode, VMware vSphere Server displays the following message: `I2C error detected.`	When the storage controller battery is in the learning mode, the following message is displayed in the **Hardware Status** tab of VMware vSphere Server: `I2C error detected.`	There is no loss of functionality. This error message can be ignored.	ESX/ESXi 4.0 Update 1

Issue	Description	Resolution	Applies to
On a Non-Uniform Memory Access (NUMA) enabled system, ESX/ESXi may fail to install or boot because of unbalanced memory distribution across the nodes.	On a NUMA enabled system with unbalanced memory configuration, ESX/ESXi may fail to install or boot. The following error message is displayed: `The BIOS reports that NUMA node X has no memory. This problem is either caused by a bad BIOS or a very unbalanced distribution of memory modules.` The performance of the system may be degraded. **NOTE:** The PowerEdge M905 system installed with ESX/ESXi and configured with the Node Interleaving option as **Disabled** (NUMA enabled) in the system BIOS may fail to boot. This issue occurs if the processor nodes are not populated with similar amount of memory.	VMware recommends populating all the processor nodes with similar amount of memory to enable balanced distribution of memory across the nodes.	ESX/ ESXi 4.0.*x*

Issue	Description	Resolution	Applies to
The PowerEdge 6850 service console displays the following message: `Can't boot system as genuine NUMA.`	The following message is displayed on the PowerEdge 6850 service console: `TSC: 40723530 cpu0:0) NUMA: 706: Can't boot system as genuine NUMA. Booting with 1 fake node(s)`.	There is no loss of functionality. This error message can be ignored.	ESX 4.0 Update 1
If a USB optical drive or an iDRAC virtual CD drive is connected to an ESX/ESXi host after the system completes boot, the device may not be available to the VMs.	If a USB optical drive or an iDRAC virtual CD drive is connected to an ESX/ESXi host after the system completes boot, the device may not appear in the **Host Device** drop down menu of the **VM Settings** tab in vCenter Server/ vSphere Client.	To resolve this issue, perform one of the following steps: **1** Reconnect the ESX/ESXi host to VMware vSphere Server/ vSphere Client. **2** Restart the **mgmt-vmware** service on the ESX host. **3** Restart the management agents on the ESXi host.	ESX/ESXi 4.0.*x*

Issue	Description	Resolution	Applies to
The contents of the PowerEdge RAID Controller (PERC) or Cost-Effective RAID Controller (CERC) cache are not flushed to the disk during a graceful shutdown of ESX/ESXi 4.0.	During a graceful shutdown, ESX/ESXi fails to trigger the shutdown of the storage controller. This might result in a data loss if the RAID controller cache policy is set to **write-back**. **CAUTION: If the shutdown of the storage controller is not triggered by the operating system, the controller cache contents are not flushed to the disk. If the battery backup unit of the controller gets discharged during this period, there might be data corruption.**	To resolve this issue, install the **ESX400-200907001** patch for ESX 4.0, and the **ESXi400-200907001** patch for ESXi 4.0. Download the patch files from **vmware.com/mysupport/download**. For more information, see **kb.vmware.com/kb/1012794**.	ESX/ESXi 4.0
Internet SCSI (iSCSI) storage volumes configured with ESX/ESXi may be lost when the active storage controller fails and failover occurs.	When the active storage controller of an iSCSI storage array fails and failover occurs, the iSCSI initiator of ESX/ESXi may fail to retry. The connection to the iSCSI volumes may be lost.	To use the iSCSI storage arrays with ESX/ESXi, you must download and install the **ESX400-200906001** patch for ESX 4.0 and **ESXi400-200906001** patch for ESXi 4.0. Download the patch files from **vmware.com/mysupport/download**.	ESX/ESXi 4.0

Issue	Description	Resolution	Applies to
The PERC 6/i Integrated device name is displayed incorrectly as `MegaRAID SAS1078R`.	vSphere Client and the **lspci** command in the service console display the PERC 6/i device name and label as `MegaRAID SAS1078R` instead of `Dell PowerEdge RAID Controller 6/i.`	This issue occurs because the PERC 6/i label, Device ID, and PCI ID are not updated in the **/etc/vmware/pciid** configuration file and the **pciid** xml file.	ESX/ESXi 4.0
VMware vSphere Server or VMware vSphere Client displays the USB storage controller on an ESX/ESXi system as `No Name provided vmhba#`.	The USB storage controller on an ESX/ESXi system is displayed as No Name provided `vmhba#` in the **Storage Adapters** section of vCenter Server or vSphere Client.	The USB Controller Device IDs are not mapped in any of the **pciid** configuration files. Hence, the agent present in ESX/ESXi is unable to read any name associated with the USB controller. There is no loss of functionality.	ESX/ESXi 4.0.*x*
VMware vSphere Server or VMware vSphere Client displays the Service Tag of a blade enclosure instead of the Service Tag of the blade itself.	When a blade server is connected to vSphere Client or VMware vSphere Server, the client displays the Service Tag information for the enclosure instead of the blade.	This issue occurs because ESX reads the Service Tag from the **smbios** of the blade enclosure.	ESX/ESXi 4.0.*x*
When you run the **lspci** command on the service console, the PERC 4/DC device name is displayed incorrectly as `MegaRAID`.	The **lspci** command's output on the service console displays the PERC 4/DC device name and label as `MegaRAID` instead of `Dell PowerEdge RAID Controller 4/DC`.	This issue occurs because the PERC 4/DC label, Device ID, and PCI ID are not updated in the **/etc/vmware/pciid** configuration file and the **pciid** xml file.	ESX 4.0.*x*

Issue	Description	Resolution	Applies to
The ESX service console displays error messages related to the Small Computer System Interface (SCSI) on some PowerEdge systems.	On some PowerEdge systems, you may observe error messages related to SCSI. For example, `SCSI: Removable device failed error recovery – offlined. Sr 2:0:14:0: Rejecting I/O to offline device.`	The issue occurs because of the invalid entries created in the **/proc/scsi/scsi** file when you attach or detach USB-based devices. You can remove these invalid entries by rescanning the relevant **vmkernel** adapter using the **esxcfg-rescan** command in the service console.	ESX 4.0.*x*
The DRAC 4 adapter is displayed as `unknown` in the service console of ESX.	The **lspci** command's output displays the DRAC 4 adapter as an `unknown` device in the service console of ESX.	This issue occurs because the DRAC 4 Device ID and Vendor ID are not updated in the **vmware-devices.map** configuration file.	ESX 4.0
When you unplug the power cord from the PowerEdge R410 and PowerEdge T410 systems, the VMware vSphere Server health status page displays a green status for the power supply and also displays the power rating.	When you unplug the power cord from the PowerEdge R410 and PowerEdge T410 systems, the VMware vSphere Server **Health Status** page displays a normal status (green) for the overall power status, and also displays the power rating. However, all the sensors display critical alert (red) and the system board displays the **Lost Redundancy** status.	This is an expected behavior in all new 11G Dell systems and is working as designed. The power sensor is present and functions correctly. It displays the **Lost Redundancy** status correctly when the external AC power supply is disconnected.	ESX 4.0.*x*

Issue	Description	Resolution	Applies to
Running the **vihostupdate** command from the vSphere CLI fails.	In some cases, if you attempt to use the **vihostupdate** command from the vSphere CLI to install a patch/driver offline bundles on an ESXi 4.0 host without an associated LUN, the scratch directory on the ESXi 4.0 host might not be configured and the installation fails. When installation fails, the following error message may be displayed: `Install failed: No Space left on the device / Insufficient space available on the host.` Patch/driver offline bundles installation using VMware Update Manager is unaffected by this issue.	You can either install the patch/driver offline bundles using VMware Update Manager, or you can work around the issue and continue to use **vihostupdate** if you configure a scratch directory on a vmfs volume connected to the host (if one is available). For more information, see **kb.vmware.com/kb/1012640**	ESXi 4.0
vSphere Client displays invalid values for hardware information of the Double-Data-Rate 3 (DDR3) and Dual in-line Memory Module (DIMM).	vSphere Client displays invalid values for hardware information of DDR3 and DIMMs under the **Hardware Status** tab.	This issue is due to a limitation in the specifications for the **SMBIOS** or the common information model (CIM).	ESX 4.0.*x*

Issue	Description	Resolution	Applies to
Service console becomes inaccessible on upgrading to ESX 4.0 from ESX 2.5.5.	When you follow the upgrade path of ESX 2.5.5→ ESX 3.5.*x*→ ESX 4.0, you cannot log in to the service console of the upgraded system. This is due to corruption of the Pluggable Authentication Module (PAM) libraries in ESX 4.*x* COS when upgraded from 2.5.*x* to 4.*x*.	For resolution, see **kb.vmware.com/kb/1013431**.	ESX 4.0
For some Ethernet network cards, the Direct Console User Interface (DCUI) displays the **Hardware Label** as `N/A`.	For some network cards, the **Hardware Label** field in the DCUI of ESXi displays `N/A` instead of a valid device description.	This issue occurs because of the method in which ESXi maps the device to the user interface by checking the output of the **lspci** and **smbios** commands from the system. This is a cosmetic issue. There is no loss of functionality.	ESXi 4.0
Upgrading from ESXi 3.5 Update 4 to ESXi 4.0 may fail on some systems.	Upgrading ESXi 3.5 Update 4 to ESXi 4.0 may fail displaying the following message on some systems: `ERROR: Unsupported boot disk.` `The boot device layout on the host does not support upgrade.`	If the upgrade fails, backup the ESXi 3.5 Update 4 configuration and the VMs configured on that ESXi host. To setup the ESXi 4.0 host: **1** Perform a fresh installation of ESXi 4.0 and restore the configuration. **2** Add the previously existing Virtual Machine File System (VMFS) datastore containing the VMs to the ESXi 4.0 host and then add them back to the inventory.	ESXi 4.0 Installable

Issue	Description	Resolution	Applies to
Network adapter description displayed in VMware vSphere Server is not correct.	The on-board 5722 network adapter description in VMware vSphere Server displays the codename of the PowerEdge system, that is Pandora. It is shown as `PWA-Pandora Motherboard [PowerEdge T105]`.	This is a cosmetic issue. There is no loss of functionality. This issue is fixed in ESXi 4.0 Update 1.	ESXi 4.0 Installable
The device enumeration order displayed in ESXi 4.0 Installable may differ from that displayed by the storage controller.	The LUNs that are associated in the system may be displayed in a different order when you install the ESXi Installable edition.	You must manually identify the correct drive for ESXi installation by using the size of the LUN and label. **CAUTION: Selecting an incorrect LUN for ESXi installation may cause loss of data.**	ESXi 4.0.*x* Installable

Additional References

- VMware Patch Download—**vmware.com/patch/download**
- VMware Knowledge Base—**vmware.com/kb**
- VMware Documentation—**vmware.com/support/pubs**
- Dell Documentation—**support.dell.com/manuals**