Dell[™] PowerEdge[™] 2850 Systems

Information Update

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Information Update

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.

🕂 CAUTION: A CAUTION indicates a potential for property damage, personal injury, or death.

Abbreviations and Acronyms

For a complete list of abbreviations and acronyms, see "Glossary" in your User's Guide.

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This document provides updated information for your system on the following topics:

- Enabling Video Hardware Acceleration in the Microsoft[®] Windows[®] Server 2003 Operating System
- Correcting Flat-Panel Display Video Problems During Microsoft Windows Server 2003
 Operating System Installations
- Maintaining Proper Back-Panel Ventilation
- Failure to Load usb-ohci Driver Message on Systems Running Red Hat[®] Enterprise Linux (version 2.1)
- Single Memory Module Installation
- NIC Teaming Limitations
- Redundant Power-Supply Indicator Code Update
- LCD Status Messages Update

Enabling Video Hardware Acceleration in the Microsoft Windows Server 2003 Operating System

By default, video hardware acceleration is set to a low setting by the Microsoft Windows Server 2003 operating system. Your system's video controller supports enhanced features and requires that the video hardware acceleration be set to its highest (**Full**) setting. Operating the system without adjusting the video hardware acceleration to its highest setting may cause the system to become unstable under certain conditions. To adjust the video hardware acceleration, follow these steps:

1 Click Start, point to Control Panel, and then click Display.

You can also right-click the desktop, and then click Properties.

- 2 Click the Settings tab in the Display Properties window, and then click Advanced.
- **3** Click the **Troubleshoot** tab, and move the hardware acceleration slider to **Full**.
- 4 Click OK, and then click OK.

If you reinstall or update the video drivers, or if you reinstall Windows Server 2003, then reset the video hardware acceleration to its **Full** setting again.

Correcting Flat-Panel Display Video Problems During Microsoft Windows Server 2003 Operating System Installations

NOTE: The following information applies only to Microsoft Windows Server 2003 operating system installations on systems that have certain flat-panel displays attached, and console redirection is enabled in the System Setup program (console redirection is disabled by default). Systems that have a CRT monitor attached, or systems that are having any other operating system installed, are not affected.

Under certain conditions, the image on some flat-panel displays may roll during the installation of the Microsoft Windows Server 2003 operating system. This is caused by console redirection being enabled in the System Setup program (console redirection is disabled by default).

Console redirection is intended for system management from a terminal attached to the system's serial port. When Windows Server 2003 detects that console redirection is enabled, it optimizes its installation screens to a low-resolution text mode for a vt100-compatible terminal. Some flat-panel displays cannot synchronize to that mode.

To correct the problem, restart the system, enter the System Setup program, and disable console redirection. After installing the Windows Server 2003 operating system, enter the System Setup program, and enable console redirection, if desired.

Maintaining Proper Back-Panel Ventilation

The back panel of your system provides airflow vents to maintain proper ventilation to the inside of your system. Never place labels or other obstacles over an airflow vent.

Failure to Load usb-ohci Driver Message on Systems Running Red Hat Enterprise Linux (version 2.1)

A failure message may be displayed when Initializing USB controller (usb-ohci) appears during startup. Update versions of Red Hat Enterprise Linux (version 2.1) prior to Update 4 mistakenly attempt to load this driver for the USB 2.0 controller. Red Hat Enterprise Linux (version 2.1) does not support USB 2.0. To avoid this erroneous message on versions prior to Update 4, remove the line in /etc/modules.conf that causes usb-ohci to load. Otherwise, install Red Hat Enterprise Linux (version 2.1) Update 4 to resolve the problem.

Single Memory Module Installation

If only one memory module is installed, it must be installed in socket DIMM1_A or DIMM1_B. Two-way interleaving is not supported for this configuration. See the *Installation and Troubleshooting Guide* for more information about memory modules.

NIC Teaming Limitations

If you configure the baseboard management controller (BMC) to access the system using the first integrated NIC (NIC1), teaming functionality and BMC functionality are affected in certain situations, as shown in Table 1-1.

	AFT, ALB/RLB, and SFT Teaming Mode	IEEE 802.3ad and Ether Channel Teaming Mode
Action	Effect	Effect
NIC1 allocated to BMC <i>before</i> team is created	Normal teaming and BMC functionality.	Normal teaming functionality. BMC functionality may be affected because of loss of management traffic.
	BMC and NIC1 issue a warning message about the loss of management traffic in the event of adaptive failover.	BMC and NIC1 issue a warning message about loss of management traffic in the event of adaptive failover.
NIC1 allocated to BMC <i>after</i> team is created	Normal teaming and BMC functionality.	Normal teaming functionality. BMC functionality may be affected because of loss of management traffic.
	BMC issues a warning message about the loss of management traffic in the event of adaptive failover.	BMC issues a warning message about loss of management traffic in the event of adaptive failover.
	NIC1 does not display a warning message but teaming functions normally.	NIC1 does not display a warning message but teaming functions normally.
NIC1 BMC access disabled <i>before</i> team is created	Normal teaming functionality	Normal teaming functionality
NIC1 BMC access disabled <i>after</i> team is created	Normal teaming functionality	Normal teaming functionality

Table 1-1.	Effect of BMC Use of NIC1	on Teaming	I Functionality
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NOTE: To avoid false error messages, use only the Intel[®] NIC drivers provided by Dell.

Redundant Power-Supply Indicator Code Update

Table 1-2 correctly identifies the redundant power-supply indicator codes. See your *Installation and Troubleshooting Guide* for more information about the redundant power supply.

Indicator	Indicator Code		
Power-on	Green indicates that the power supply is operational.		
Fault	Amber indicates a problem with the power supply (fan failure, voltage error, etc.).		
Power present	Green indicates that power is present at the power supply and that the system is connected to a power source.		

Table 1-2. Power-Supply Indicator Codes

LCD Status Messages Update

Table 1-3 lists updates to the LCD status messages that can occur and the probable cause for each message. The LCD messages refer to events recorded in the system event log (SEL). For information on the SEL and configuring system management settings, see the systems management software documentation.

Line 1 Message	Line 2 Message	Causes	Corrective Actions
SYSTEM ID	SYSTEM NAME	SYSTEM ID is a unique name, five characters or less, defined by the user	This message is for information only. You can change the system ID and name in the System Setup program. See your User's Guide for instructions.
		<i>SYSTEM NAME</i> is a unique name, 16 characters or less, defined by the user.	
		The system ID and name display under the following conditions:	
		• The system is powered on.	
		• The power is off and active POST errors are displayed.	
E0000	OVRFLW CHECK LOG	LCD overflow message.	Check the SEL for details on the events.
		A maximum of three error messages can display sequentially on the LCD. The fourth message displays as the standard overflow message.	

Table 1-3. LCD Status Messages

Line 1 Message	Line 2 Message	Causes	Corrective Actions
E0119	TEMP AMBIENT TEMP BMC	Ambient system temperature is out of acceptable range.	See "Troubleshooting System Cooling Problems" in your Installation and Troubleshooting Guide.
E0119	TEMP RISER	Riser card is out of acceptable temperature range.	See "Troubleshooting System Cooling Problems" in your Installation and Troubleshooting Guide.
E0212	VOLT PG n	System power supply is out of acceptable voltage range; faulty or improperly installed power supply.	See "Troubleshooting Redundant Power Supplies" in your Installation and Troubleshooting Guide.
E0212	VOLT BATT ROMB	Faulty RAID battery.	Replace the RAID battery. See "Activating the Optional Integrated RAID Controller" in your Installation and Troubleshooting Guide.
E0212	VOLT BATT CMOS	Faulty system battery.	Replace the system battery. See "System Battery" in your Installation and Troubleshooting Guide.
E0212	VOLT RISER 5V VOLT RISER	Riser card voltage is out of acceptable range; faulty or improperly installed power supply; faulty system board.	Reinstall the expansion-card cage. See "Installing the Expansion- Card Cage" in your Installation and Troubleshooting Guide. If the problem persists, see "Getting Help" in your Installation and Troubleshooting Guide.
E0412	RPM FAN <i>n</i> FAN REDUNDANCY LOST	Specified cooling fan is faulty, improperly installed, or missing.	See "Troubleshooting System Cooling Problems" in your Installation and Troubleshooting Guide.
E0780	PROC n PRESENCE	Microprocessor is not installed in socket <i>n</i> .	Install a microprocessor in socket n. See "Replacing a Processor" in your Installation and Troubleshooting Guide.

Table 1-3. LCD Status Messages (continued)

Line 1 Message	Line 2 Message	Causes	Corrective Actions
E07F0	PROC n IERR	Faulty or improperly installed microprocessor.	See "Troubleshooting the Microprocessors" in your Installation and Troubleshooting Guide.
E07FA	PROC <i>n</i> THERMTRIP	Specified microprocessor is out of acceptable temperature range and has halted operation.	See "Troubleshooting System Cooling Problems" in your Installation and Troubleshooting Guide. If the problem persists, ensure that the microprocessor heat sinks are properly installed. See "Replacing a Processor" in your Installation and Troubleshooting Guide. NOTE: The LCD continues to display this message until the system's power cord is disconnected and reconnected to the AC power source, or the SEL is cleared using either Server Assistant or the BMC Management Utility. See the Dell OpenManage Baseboard Management Controller User's Guide for information about these utilities.
E0876	PS n MISSING PS n STATUS	No power available from the specified power supply; specified power supply is improperly installed or faulty.	See "Troubleshooting Redundant Power Supplies" in your Installation and Troubleshooting Guide.
E0876	PS n PREDICTIVE	Power supply voltage is out of acceptable range; specified power supply is improperly installed or faulty.	See "Troubleshooting Redundant Power Supplies" in your Installation and Troubleshooting Guide.
E0876	PS n AC LOST PS n AC RANGE	Power source for specified power supply is unavailable, or out of acceptable range.	Check the AC power source for the specified power supply.

Table 1-3. LCD Status Messages (continued)

Line 1 Message	Line 2 Message	Causes	Corrective Actions
E0D76	BP DRIVE n	Faulty or improperly installed	See "Troubleshooting SCSI Hard Drives" "Troubleshooting a RAID Controller Card, " and "Troubleshooting the Integrated RAID Controller" in your Installation and Troubleshooting Guide.
	1x2 DRIVE FAIL n	hard drive or RAID controller.	
	SCSI CONNECTOR		
EB107	PROC BUS ERR PROC INIT ERR PROC PROTOCOL ERR	Faulty or improperly installed microprocessor or system board.	See "Troubleshooting the Microprocessors" in your Installation and Troubleshooting Guide. If the problem persists, see "Getting Help" in your Installation and Troubleshooting Guide.
EB107	PCIE FATAL ERR CHIPSET ERR	Faulty or improperly installed PCI-e card. Faulty or improperly installed riser card. Faulty system board.	Remove and reseat the PCI-e expansion cards. If the problem persists, see "Troubleshooting Expansion Cards" in your Installation and Troubleshooting Guide.
			Reinstall the expansion-card cage. See "Installing the Expansion- Card Cage" in your <i>Installation</i> <i>and Troubleshooting Guide</i> .
			If the problem persists, the riser card or system board is faulty. See "Getting Help" in your Installation and Troubleshooting Guide.
EB107	MEMORY MIRRORED	Memory mirroring enabled.	Information only.
EB107	MEMORY SPARED	Memory spare bank enabled.	Information only.
EFFF2	ROMB PRESENCE	Integrated RAID controller is activated.	Information only.
IB110	SBE LOG DISABLED LOGGING DISABLED		Information only.
IS000	INTRUSION	System cover has been removed.	Information only

 Table 1-3.
 LCD Status Messages (continued)

NOTE: For the full name of an abbreviation or acronym used in this table, see the "Glossary" in your *User's Guide*.

Troubleshooting System Memory

The following procedure provides improved system memory troubleshooting techniques.

Problem

- Faulty memory module.
- Faulty system board.
- System status indicator is amber.
- LCD error code or system beep code indicates a memory problem.
- Systems management software issues a memory-related message through the LCD display or systems management software.

Action

Memory-related beep code during system startup.

- CAUTION: Only trained service technicians are authorized to remove the system cover and access any of the components inside the system. See your *Product Information Guide* for complete information about safety precautions, working inside the computer, and protecting against electrostatic discharge.
- **1** Turn off the system and attached peripherals, and disconnect the system from the electrical outlet.
- 2 Open the system. See "Opening the System" in "Troubleshooting Your System" in the *Installation and Troubleshooting Guide*.
- **3** Reseat the memory modules in their sockets. See "Installing Memory Modules" in "Installing System Components" in the *Installation and Troubleshooting Guide*.
- **4** Close the system. See "Closing the System" in "Troubleshooting Your System" in the *Installation and Troubleshooting Guide*.
- **5** Reconnect the system to the electrical outlet, and turn on the system and attached peripherals.

If there is no memory-related beep code, the problem is resolved.

- **6** Turn off the system and attached peripherals, and disconnect the system from the electrical outlet.
 - **a** Open the system. See "Opening the System" in "Troubleshooting Your System" in the *Installation and Troubleshooting Guide*.
 - **b** Remove all memory modules from the system. See "Removing Memory Modules" in "Installing System Components" in the *Installation and Troubleshooting Guide*.
 - c Replace one of the memory modules in socket DIMM1_B.
 - **d** Close the system. See "Closing the System" in "Troubleshooting Your System" in the *Installation and Troubleshooting Guide*.

- **e** Reconnect the system to the electrical outlet, and turn on the system and attached peripherals.
- f If there is no memory-related beep code, the memory module is not faulty.
 - If the beep code reoccurs, the memory module is faulty and should be replaced.
- **7** Perform the following steps:
 - **a** Turn off the system and attached peripherals, and disconnect the system from its electrical outlet.
 - **b** Open the system. See "Opening the System" in "Troubleshooting Your System" in the *Installation and Troubleshooting Guide*.
 - **c** Repeat step c through step f in step 6 for each memory module installed.
- 8 If you have tested all the memory modules and the problem persists, or none of the memory modules passes, the system board is faulty. See "Getting Help." in the *Installation and Troubleshooting Guide*.

The system starts up successfully but there are memory-related error messages.

CAUTION: Only trained service technicians are authorized to remove the system cover and access any of the components inside the system. See your *Product Information Guide* for complete information about safety precautions, working inside the computer, and protecting against electrostatic discharge.

- **1** Turn off the system and attached peripherals, and disconnect the system from the electrical outlet.
- 2 Open the system. See "Opening the System" in "Troubleshooting Your System" in the *Installation and Troubleshooting Guide*.
- **3** Ensure that the memory modules are populated correctly. See "General Memory Module Installation Guidelines" in "Installing System Components."

If the memory modules are populated correctly, continue to the next step.

- **4** Reseat the memory modules in their sockets. See "Installing Memory Modules" in "Installing System Components" in the *Installation and Troubleshooting Guide*.
- 5 Close the system. See "Closing the System" in "Troubleshooting Your System" in the *Installation and Troubleshooting Guide*.
- **6** Reconnect the system to the electrical outlet, and turn on the system and attached peripherals.

If there is no memory-related error message, the problem is resolved.

If the problem persists, see "Getting Help" in the Installation and Troubleshooting Guide.

There are memory-related error messages on the system LCD, or in the SEL.

- **1** Enter the System Setup program and disable the **Redundant Memory** option, if applicable. See "Using the System Setup Program" in your *User's Guide*.
- 2 Run the appropriate online diagnostic test. See "Using Server Administrator Diagnostics" in "Running System Diagnostics" in the *Installation and Troubleshooting Guide*.
- **3** Replace the memory module(s) identified by the diagnostics. See "Installing Memory Modules" in "Installing System Components" in the *Installation and Troubleshooting Guide*.
- **4** Enter the System Setup program and enable the **Redundant Memory** option, if disabled in step 1.
- **5** Restart the system. If there are still memory-related errors on the system LCD, or in the system event log (SEL), see "Getting Help" in the *Installation and Troubleshooting Guide*.