



# Server Management

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The following table lists the server management BIOS settings that you can configure through a BIOS policy or the default BIOS settings:

Name	Description	Supported Attributes			
		Versions	Platforms	Values	Dependencies
<b>Assert NMI on PERR</b>	Whether the BIOS generates a non-maskable interrupt (NMI) and logs an error when a processor bus parity error (PERR) occurs.	4.2(1)	C240 M6, C220 M6, C225 M6, C245 M6	<b>Enabled</b> , Disabled	
<b>Assert NMI on SERR</b>	Whether the BIOS generates a non-maskable interrupt (NMI) and logs an error when a system error (SERR) occurs.	4.2(1)	C240 M6, C220 M6, C225 M6, C245 M6	<b>Enabled</b> , Disabled	
<b>Baud Rate</b>	What Baud rate is used for the serial port transmission speed. If you disable Console Redirection, this option is not available.	4.2(1), 5.0(1), 5.0(2)	C240 M6, C220 M6, C225 M6, C245 M6, B200 M6, X210c M6, C220 M7, C240 M7, X210c M7, X410c M7	9.6k, 19.2k, 38.4k, 57.6k, <b>115.2k</b>	This setting must match the setting on the remote terminal application.

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<b>Consistent Device Naming</b>	Consistent Device Naming allows Ethernet interfaces to be named in a consistent manner. This makes Ethernet interface names more uniform, easy to identify, and persistent when adapter or other configuration changes are made.	4.2(1)	C240 M6, C220 M6, C225 M6, C245 M6	Enabled, <b>Disabled</b>	
<b>Adaptive Memory Training</b>	When this token is enabled, the BIOS saves the memory training results (optimized timing/voltage values) along with CPU/memory configuration information and reuses them on subsequent reboots to save boot time. The saved memory training results are used only if the reboot happens within 24 hours of the last save operation.	4.2(1)	C240 M6, C220 M6, C225 M6, C245 M6, X210c M6, C220 M7, C240 M7, X210c M7, X410c M7	<b>Enabled</b> , Disabled	
<b>BIOS Techlog Level</b>	This option denotes the type of messages in BIOS tech log file.	4.2(1)	C240 M6, C220 M6, C225 M6, C245 M6, C220 M7, C240 M7, X210c M7, X410c M7	Maximum, <b>Minimum</b> , Normal <ul style="list-style-type: none"> <li>• <b>Maximum</b>—Critical messages will be displayed in the log file. This is the default option</li> <li>• <b>Minimum</b>—Warning and loading messages will be displayed in the log file.</li> <li>• <b>Normal</b>—Normal and information related messages will be displayed in the log file.</li> </ul>	

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<b>OptionROM Launch Optimization</b>	The Option ROM launch is controlled at the PCI Slot level, and is enabled by default. In configurations that consist of a large number of network controllers and storage HBAs having Option ROMs, all the Option ROMs may get launched if the PCI Slot Option ROM Control is enabled for all. However, only a subset of controllers may be used in the boot process. When this token is enabled, Option ROMs are launched only for those controllers that are present in boot policy.	4.2(1)	C240 M6, C220 M6, C225 M6, C245 M6, C220 M7, C240 M7, X210c M7, X410c M7	<b>Enabled</b> , Disabled	

Name	Description	Supported Attributes			
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<b>Console Redirection</b>	Allows a serial port to be used for console redirection during POST and BIOS booting. After the BIOS has booted and the operating system is responsible for the server, console redirection is irrelevant and has no effect	4.2(1), 5.0(1), 5.0(2)	C240 M6, C220 M6, C225 M6, C245 M6, B200 M6, X210c M6, C220 M7, C240 M7, X210c M7, X410c M7	<b>Disabled</b> , COM0, COM 1, serial-port-b Platform Default <ul style="list-style-type: none"> <li>• COM0 enables serial port for console redirection during POST. This option is valid only for M6 blade servers and rack-mount servers.</li> <li>• COM1 or serial-port-b enables serial port B for console redirection and allows it to perform server management tasks. This option is only valid for rack-mount servers.</li> </ul>	If you enable this option, you also disable the display of the Quiet Boot logo screen during POST.
<b>Flow Control</b>	Whether a handshake protocol is used for flow control. Request to Send / Clear to Send (RTS/CTS) helps to reduce frame collisions that can be introduced by a hidden terminal problem.	4.2(1), 5.0(1), 5.0(2)	C240 M6, C220 M6, C225 M6, C245 M6, B200 M6, X210c M6, C220 M7, C240 M7, X210c M7, X410c M7	<b>None</b> , RTC-CTS	This setting must match the setting on the remote terminal application.
<b>FRB-2 Timer</b>	Whether the FRB2 timer is used for recovering the system if it hangs during POST.	4.2(1), 5.0(1), 5.0(2)	C240 M6, C220 M6, C225 M6, C245 M6, B200 M6, X210c M6, C220 M7, C240 M7, X210c M7, X410c M7	<b>Enabled</b> , Disabled	

Name	Description	Supported Attributes			
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<b>Legacy OS Redirection</b>	Whether redirection from a legacy operating system, such as DOS, is enabled on the serial port.	4.2(1)	C240 M6, C220 M6, C225 M6, C245 M6	<b>Enabled</b> , Disabled	
<b>OS Boot Watchdog Timer</b>	Whether the BIOS programs the watchdog timer with a predefined timeout value. If the operating system does not complete booting before the timer expires, the CIMC resets the system and an error is logged.	4.2(1), 5.0(1), 5.0(2)	C240 M6, C220 M6, C225 M6, C245 M6, B200 M6, X210c M6, C220 M7, C240 M7, X210c M7, X410c M7	<b>Enabled</b> , Disabled	
<b>OS Boot Watchdog Timer Policy</b>	What action the system takes if the watchdog timer expires.	4.2(1), 5.0(1), 5.0(2)	C240 M6, C220 M6, C225 M6, C245 M6, B200 M6, X210c M6, C220 M7, C240 M7, X210c M7, X410c M7	<b>Power-off</b> , Reset	
<b>OS Boot Watchdog Timer Timeout</b>	What timeout value the BIOS uses to configure the watchdog timer.	4.2(1), 5.0(1), 5.0(2)	C240 M6, C220 M6, C225 M6, C245 M6, B200 M6, X210c M6, C220 M7, C240 M7, X210c M7, X410c M7	5 minutes, <b>10 minutes</b> , 15 minutes, 20 minutes	
<b>Out-of-Band Mgmt Port</b>	Used for Windows Special Administration Control (SAC). This option allows you to configure the COM port 0 that can be used for Windows Emergency Management services. ACPI SPCR table is reported based on this setup option.	4.2(1)	C240 M6, C220 M6, C225 M6, C245 M6	<b>Enabled</b> , Disabled	

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		Versions	Platforms	Values	Dependencies
<b>Putty KeyPad</b>	Allows you to change the action of the PuTTY function keys and the top row of the numeric keypad.	4.2(1)	C240 M6, C220 M6, C225 M6, C245 M6		

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		Versions	Platforms	Values	Dependencies
				VT100, <b>Linux</b> , XTERMR6, SCO, ESCN, VT400 <ul style="list-style-type: none"> <li>• VT100—The function keys generate ESC OP through ESC O[.</li> <li>• Linux—Mimicthe Linux virtual console.Function keys F6 to F12 behave like the default mode, but F1 to F5 generate ESC [[A through ESC [[E.</li> <li>• VT400—The function keys behave like the default mode. The top row of the numeric keypad generates ESC OP through ESC OS.</li> <li>• ESCN—The default mode. The function keys match the general behavior of Digital terminals. The function keys generate sequences such as ESC [11~ and ESC [12~.</li> <li>• SCO—The function keys F1 to F12 generate ESC [M through ESC [X. The function and</li> </ul>	

Name	Description	Supported Attributes			
		Versions	Platforms	Values	Dependencies
				shift keys generate ESC [Y through ESC [j. The control and function keys generate ESC [k through ESC [v. The shift, control and function keys generate ESC [w through ESC [ {.	
<b>Redirection After BIOS POST</b>	Whether BIOS console redirection should be active after BIOS POST is complete and control given to the OS bootloader.	4.2(1), 5.0(1), 5.0(2)	C240 M6, C220 M6, C225 M6, C245 M6, B200 M6, X210c M6	<b>Always Enable, Bootloader</b> <ul style="list-style-type: none"> <li>Always Enable—BIOS Legacy console redirection is active during the OS boot and run time.</li> <li>Bootloader—BIOS Legacy console redirection is disabled before giving control to the OS boot loader.</li> </ul>	
<b>Terminal Type</b>	What type of character formatting is used for console redirection.	4.2(1), 5.0(1), 5.0(2)	C240 M6, C220 M6, C225 M6, C245 M6, B200 M6, X210c M6, C220 M7, C240 M7, X210c M7, X410c M7	PC-ANSI, <b>VT100</b> , VT100-PLUS, VT-UTF8	This setting must match the setting on the remote terminal application.