

Dell PowerEdge
C6220

Getting Started With Your System



Dell PowerEdge
C6220

**Getting Started
With Your System**

Notes, Cautions, and Warnings



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



CAUTION: A CAUTION indicates potential damage to hardware or loss of data if instructions are not followed.



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

Information in this document is subject to change without notice.

© 2013 Dell Inc. All rights reserved.

Reproduction of these materials in any manner whatsoever without the written permission of Dell Inc. is strictly forbidden.

Trademarks used in this text: Dell™, the DELL logo, and PowerEdge™ are trademarks of Dell Inc. Intel® and Intel® Xeon® are registered trademarks of Intel Corporation in the U.S. and other countries. Red Hat Enterprise Linux® and Enterprise Linux® are registered trademarks of Red Hat, Inc. in the United States and/or other countries. Novell® is a registered trademark and SUSE™ is a trademark of Novell Inc. in the United States and other countries. Citrix® and XenServer® are either registered trademarks or trademarks of Citrix Systems, Inc. in the United States and/or other countries. VMware® is a registered trademarks or trademarks of VMWare, Inc. in the United States or other countries.

Other trademarks and trade names may be used in this publication to refer to either the entities claiming the marks and names or their products. Dell Inc. disclaims any proprietary interest in trademarks and trade names other than its own.

Regulatory Model B08S

January 2013

P/N YKYJ7

Rev. A02



CAUTION: Restricted Access Location

This server is intended for installation only in restricted access locations as defined in Cl. 1.2.7.3 of IEC 60950-1: 2001 where both these conditions apply:

- Access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken.
- Access is through the use of a tool or lock and key, or other means of security, and is controlled by the authority responsible for the location.

Installation and Configuration



WARNING: Before performing the following procedure, review and follow the safety instructions that came with the system.

Installing the Tool-Less Rail Solution



WARNING: Whenever you need to lift the system, get others to assist you. To avoid injury, do not attempt to lift the system by yourself.



WARNING: The system is not fixed to the rack or mounted on the rails. To avoid personal injury or damage to the system, you must adequately support the system during installation and removal.



WARNING: To avoid a potential electrical shock hazard, a third wire safety grounding conductor is necessary for the rack installation. The rack equipment must provide sufficient airflow to the system to maintain proper cooling.



CAUTION: When installing rails in a square-hole rack it is important to ensure that the square peg slides through the square holes.

- 1 Push on the latch release buttons on the end piece midpoints to open the rail latches. See Figure 1.
- 2 Align the end pieces of the rails on the vertical rack flanges to seat the pegs in the bottom hole of the first U and the top hole of the second U. See Figure 1.


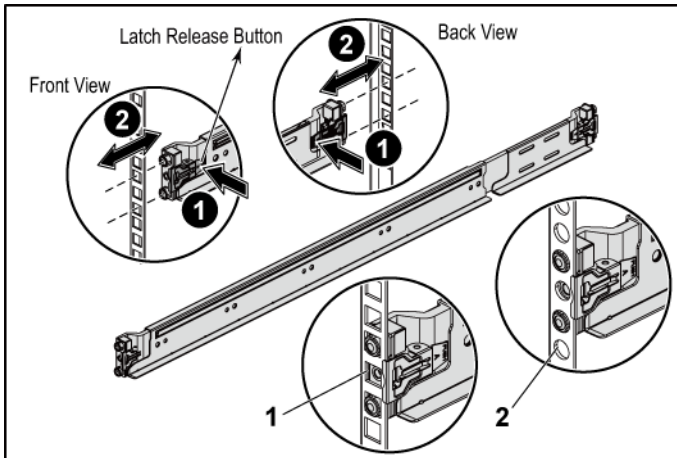

 **NOTE:** The rails can be used in both square-hole (item 1 in the following figure) and round-hole racks (item 2 in the following figure).

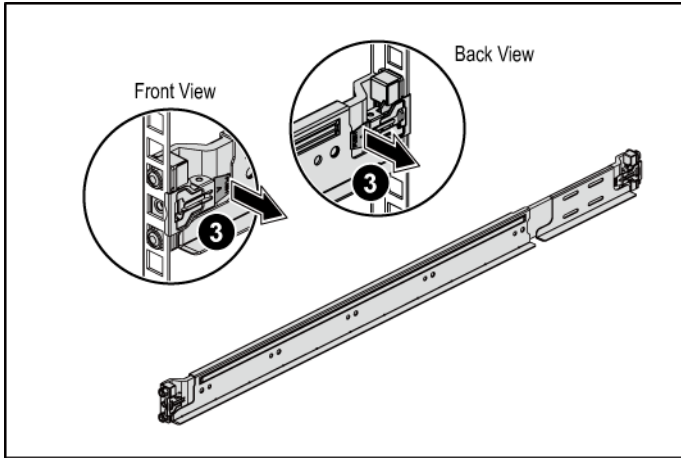
Figure 1 Pushing the Latch Release Buttons



 **NOTE:** To remove the rails, push on the latch release button on the end piece midpoint and unseat each rail.

- Engage the end of the rails and release the latch release button to have the latches locked in place. See Figure 2.

Figure 2 Releasing the Latch Release Buttons



- 4 On each vertical rack flange on the back, put two screw bases into the two square holes right above the rail. See Figure 3.
- 5 Install the chassis stabilizer shipping brackets (optional) on the back rack flanges. See Figure 3.
- 6 Simultaneously fasten the screws. See Figure 3.


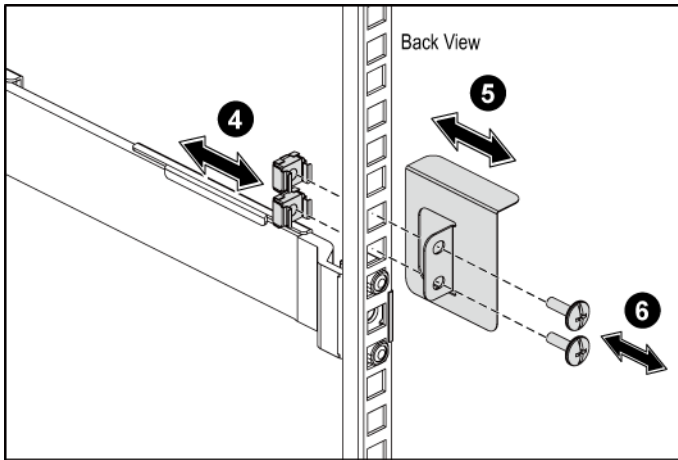
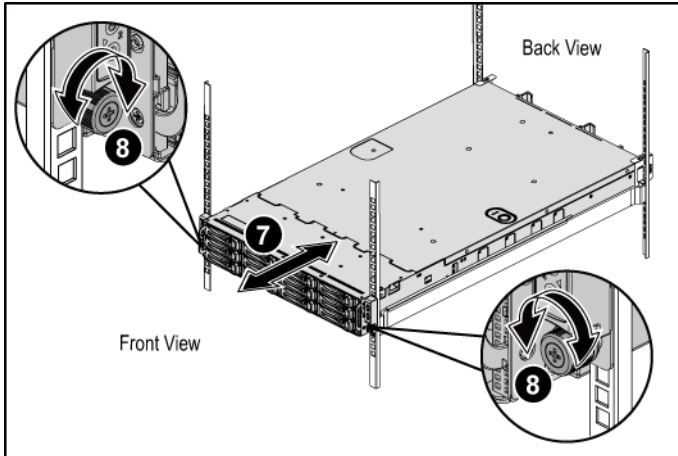
 **NOTE:** To transport systems already installed in the rack, ensure that the two chassis stabilizer shipping brackets (optional) are in place.

Figure 3 Installing the Chassis Stabilizer Shipping Brackets



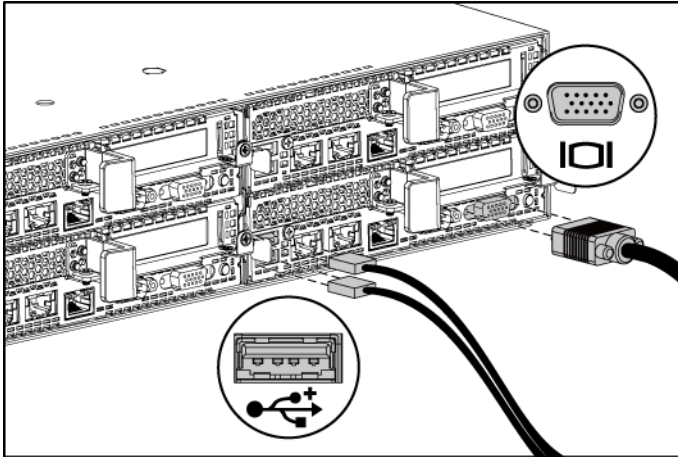
- 7 Slide the system into the rack. See Figure 4.
- 8 Tighten the thumbscrews to secure the ears of the system to the front of the rack flanges. See Figure 4.

Figure 4 Installing the Chassis onto the Rack.



Optional-Connecting the Keyboard, Mouse, and Monitor

Figure 5 Connecting the Keyboard, Mouse and Monitor

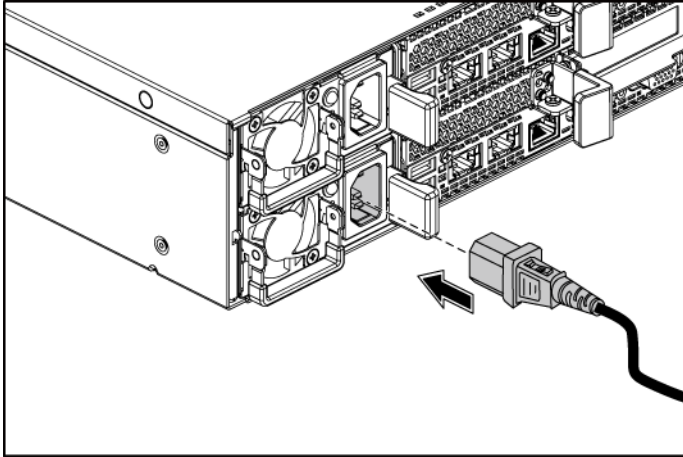


Connect the keyboard, mouse, and monitor (optional).

The connectors on the back of your system have icons indicating which cable to plug into each connector. Be sure to tighten the screws (if any) on the monitor's cable connector.

Connecting the Power Cable(s)

Figure 6 Connecting the Power Cable



Connect the system's power cable(s) to the system and, if a monitor is used, connect the monitor's power cable to the monitor. Plug the other end of the power cables into a grounded electrical outlet or a separate power source such as an uninterruptible power supply or a power distribution unit.

NOTE: The power input: 110 V and 220 V.

Turning on the System

Figure 7 Pressing the Power Button on the Front and the Monitor

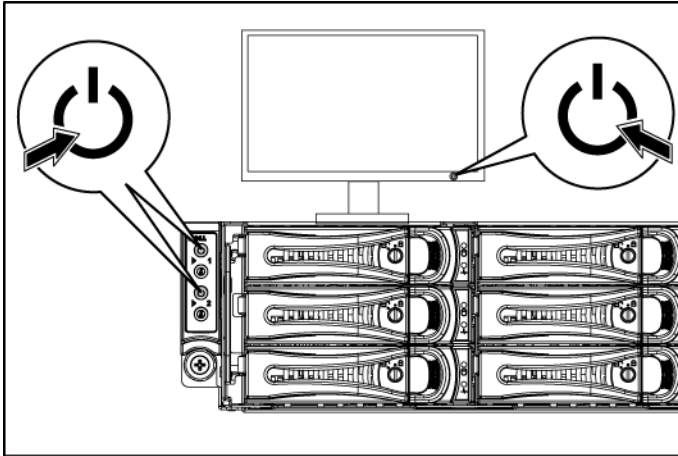
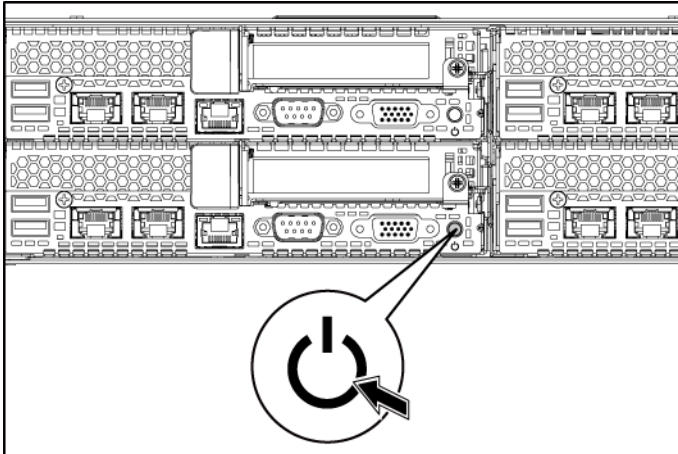


Figure 8 Pressing the Power Button on the Back



Press the power button(s) either on the front or back of the system and on the monitor. The power indicators should light green.

Complete the Operating System Setup

To install an operating system for the first time, see the installation and configuration documentation for your operating system. Be sure the operating system is installed before installing hardware or software not purchased with the system.

Supported Operating Systems

- Microsoft Windows HPC Server 2008 R2 (64-bit) Service Pack 1
- Microsoft Windows Server 2008 R2 Hyper-V Service Pack 1
- Microsoft Windows Server 2008 R2 Enterprise (64-bit) Service Pack 1
- Red Hat Enterprise Linux 6.3 (64-bit)
- Red Hat Enterprise Linux 6.3 (64-bit) with Xen and KVM Support
- SUSE Linux Enterprise Server 11 (64-bit) Service Pack 2
- VMware ESXi 5.1
- Citrix XenServer 6.0



NOTE: For the latest information on supported operating systems, see support.dell.com.

Other Information You May Need



WARNING: See the safety and regulatory information that shipped with your system. Warranty information may be included within this document or as a separate document.

The *Hardware Owner's Manual* provides information about system features and describes how to troubleshoot the system and install or replace system components. This document is available at support.dell.com/manuals.

Dell systems management application documentation provides information about installing and using the systems management software. This document is available online at support.dell.com/manuals.



NOTE: Always check for updates on support.dell.com/manuals and read the updates first because they often supersede information in other documents.

NOM Information (Mexico Only)

The following information is provided on the device described in this document in compliance with the requirements of the official Mexican standards (NOM):

Importer	Dell Inc. de México, S.A. de C.V. Paseo de la Reforma 2620-11° Piso Col. Lomas Atlas 11950 México, D.F.
Model number	B08S
Supply voltage	100-240 V AC with 1200 W Power 200-240 V AC with 1400 W Power
Frequency	50/60 Hz
Current consumption	12-8 Amps with 1200 W Power 9 Amps with 1400 W Power

Technical Specifications

Processor (Per System Board)

Processor type	Two Intel Xeon Processor E5-2600 Series product family
----------------	--

Chipset

Chipset type	Intel PCH-J chipset
--------------	---------------------

Expansion Bus (Per System Board)

Bus type	PCI Express Generation 3
Expansion slots	
PCIe	Two x16, PCIe slots 1U node: half height 2U node: full height and half height
Mezzanine card PCIe	One x8, Mezzanine slot NOTE: The mezzanine slot is only active in 2-processor configuration.

Memory (Per System Board)

Architecture	16 x DDR3 1600/1333 MHz RDIMM or UDIMM
Memory module sockets	16 x DDR3 DIMM sockets
Memory module capacities	2 GB, 4 GB, 8 GB, 16 GB or 32GB
Minimum RAM	2 GB
Maximum RAM	512 GB

Drives

Hard drives	Up to twelve 3.5-inch, hot-swappable SAS/SATA drives or twenty-four 2.5-inch, hot-swappable SAS/SATA drives NOTE: SAS hard drives are supported by add-on card.
-------------	---

Connectors (Per System Board)

Back

NIC	Two RJ-45 (10/100/1000 Mbps Ethernet)
COM	9-pin, DTE, 16550-compatible
USB	Two 4-pin, USB 2.0-compliant
Video	15-pin D-Sub VGA
Management port	RJ-45 Ethernet port for remote management access. The management LAN speed is 10Mbps/100Mbps.

Internal

Micro-SD socket	SD riser card memory socket
-----------------	-----------------------------

Video (Per System Board)

Video type	AST2300 on-board video controller, or AST1300
Video memory	16 MB

Power

NOTE: The system doesn't support a mixed installation of 1200 W and 1400 W power supplies.
NOTE: Both of these two PSUs are swappable, and they can support hot swap in any condition if system has power throttling feature.

AC power supply (per power supply)

Wattage	1200 W
Voltage	100-240 VAC, 50/60 Hz, maximum input current: 12.0-8.0 Amps NOTE: For 1200 W power supply, output 1200 W is for high line (input 200-240 VAC), output 1023 W is for low line (input 100-120 VAC).
Heat dissipation	4016.251 BTU/hr maximum
Maximum inrush current	Initial In-rush Current cannot exceed 55 Amps (peak). Secondary In-rush Current cannot exceed 35 Amps (peak).

Wattage	1400 W
Voltage	200-240 VAC, 50-60 Hz, maximum input current: 9.0 Amps
Heat dissipation	6024.376 BTU/hr maximum.
Maximum in-rush current	Initial In-rush Current cannot exceed 55 Amps (peak). Secondary In-rush Current cannot exceed 25 Amps (peak).

Battery (per system board)

System battery	CR 2032 3.0-V lithium ion coin cell
----------------	-------------------------------------

Physical

Height	8.68 cm (3.42 in)
Width	44.8 cm (17.6 in)
Depth	79.0 cm (31.1 in)
Weight (maximum configuration)	41 kg (90.38 lb) (with 12*3.5" HDD)
Weight (empty)	15.3 kg (33.73 lb) (with 2.5" HDD bay)
	16.2 kg (35.71 lb) (with 3.5" HDD bay)

Environmental

NOTE: For additional information about environmental measurements for specific system configurations, see www.dell.com/environmental_datasheets.

Temperature

Operating 10° to 35°C (50° to 95°F) with a maximum temperature gradation of 10°C per hour

NOTE: For altitudes above 2950 feet, the maximum operating temperature is derated 1°F/550 ft.

CAUTION: The maximum number of memory modules and hard drives supported on 1U and 2U node configurations, with 130W (4 and 8 core) and 135W processors, depends on the power supply installed.

Storage -40° to 65°C (-40° to 149°F) with a maximum temperature gradation of 20°C per hour

Relative humidity

Operating 20% to 80% (noncondensing) with a maximum humidity gradation of 10% per hour

Storage 5% to 95% (noncondensing)

Maximum vibration

Operating 0.26 Grms at 5–350 Hz

Storage 1.88 Grms at 10–500 Hz for 15 min

Maximum shock

Operating One shock pulse in the positive z axis (one pulse on each side of the system) of 31 G for 2.6 ms in the operational orientation

Storage Six consecutively executed shock pulses in the positive and negative x, y, and z axes (one pulse on each side of the system) of 71 G for up to 2 ms;

Six consecutively executed shock pulses in the positive and negative x, y, and z axes (one pulse on each side of the system) of 27 G faired square wave pulse with velocity change at 235 inches/second (597 centimeters/second)

Altitude

Operating -15.2 to 3,048 m (-50 to 10,000 ft.)

Storage -15.2 to 10,668 m (-50 to 35,000 ft.)

Airborne Contaminant Level

Class G1 as defined by ISA-S71.04-1985



Printed in the U.S.A.

www.dell.com |



0YKYJ7A02