Dell DR4100 Systems
Getting Started Guide

Notes, Cautions, and Warnings

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.

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

Installation And Configuration

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

Unpacking A Rack System

Unpack your system and identify each item.

Assemble the rails and install the system in the rack following the safety instructions and the rack installation instructions provided with your system.
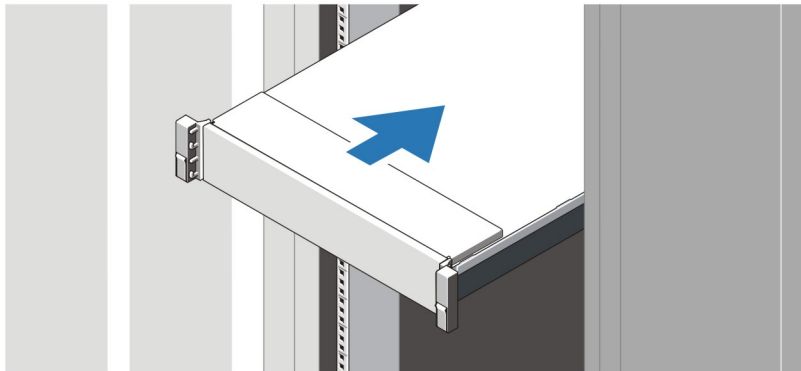

Figure 1. Installing the Rails and System in a Rack

Connecting The Optional Keyboard, Mouse, And Monitor
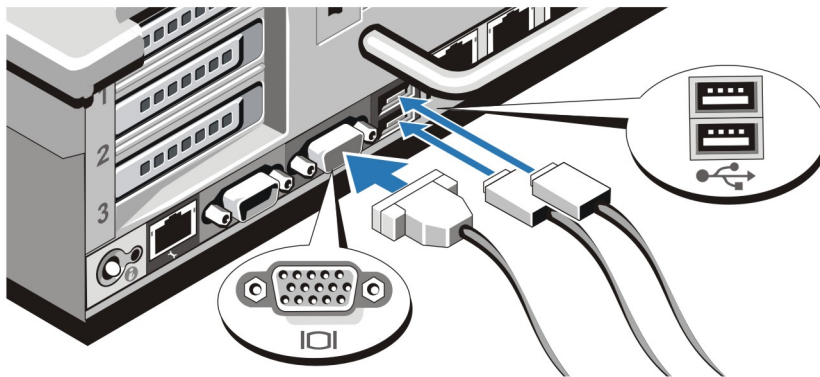
Figure 2. Connecting Keyboard, Mouse, and Monitor

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)
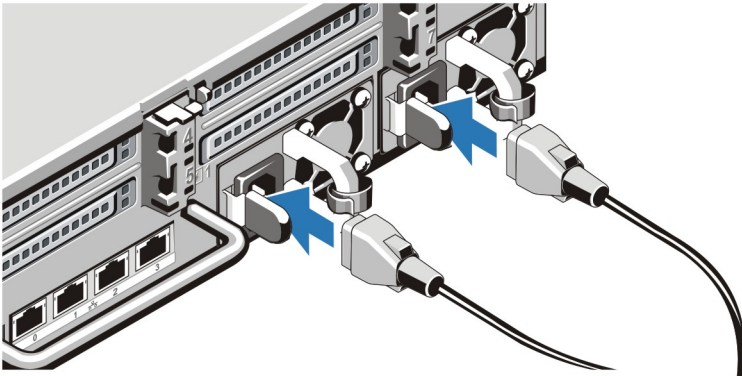
Figure 3. Connecting the Power Cable(s)

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.

Securing The Power Cable(s)
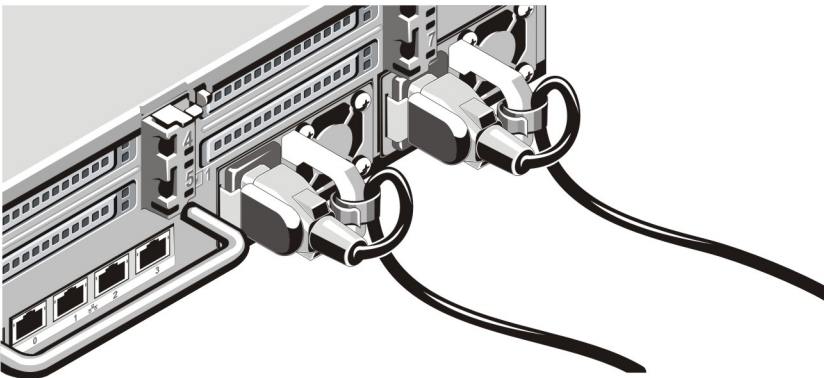
Figure 4. Securing the Power Cable(s)

Bend the system power cable(s), as shown in the illustration, and attach to the cable strap.

Plug the other end of the power cable(s) into a grounded electrical outlet or a separate power source such as an uninterruptible power supply (UPS) or a power distribution unit (PDU).

Turning On The System
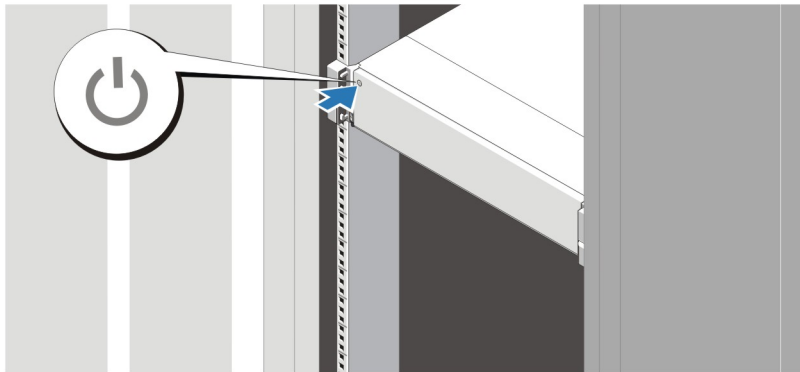
Figure 5. Turning on the System

Press the power button on the system. The power indicator should light.

Installing The Optional Bezel
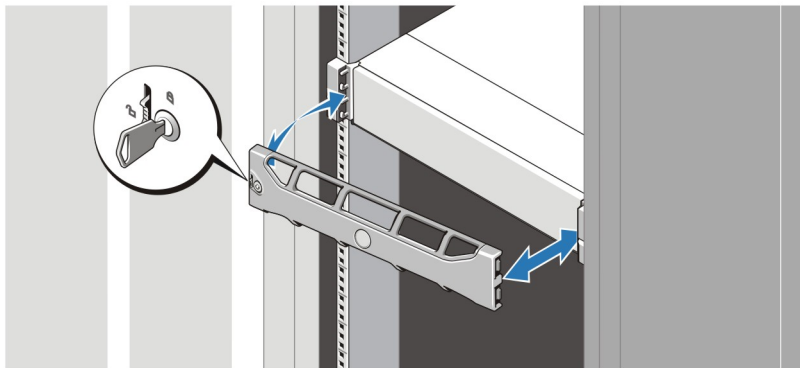
Figure 6. Installing the Bezel

Install the bezel (optional).

Dell Software License Agreement

Before using your system, read the Dell Software License Agreement that came with your system. You must consider any media of Dell-installed software as BACKUP copies of the software installed on your system's hard drive. If you do not accept the terms of the agreement, call the customer assistance telephone number. For customers in the United States, call 800-WWW-DELL (800-999-3355). For customers outside the United States, visit **support.dell.com** and select your country or region from the bottom of the page.

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 *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 online at **dell.com/support/manuals**.
- The *Interoperability Guide* provides information about the supported hardware and software versions for the system. This document is available online at **dell.com/support/manuals**.
- The rack documentation included with your rack solution describes how to install your system into a rack, if required.
- The *Command Line Reference Guide* provides information about managing DR4100 system data backup and replication operations using the command line interface (CLI). This document is available online at **dell.com/support/manuals**.
- The *Administrator's Guide* provides information about what to do on first boot during initial system setup. This document is available online at **dell.com/support/manuals**.
- For the full name of an abbreviation or acronym used in this document, see the Glossary at **dell.com/support/manuals**.

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

📝 **NOTE:** When upgrading your system, it is recommended that you download and install the latest upgrade package from **support.dell.com**.

Obtaining Technical Assistance

If you do not understand a procedure in this guide or if the system does not perform as expected, see your *Owner's Manual* at **support.dell.com**. Dell provides several online and telephone-based support and service options. For more details visit **support.dell.com**.

NOM Information

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 -11º Piso Col. Lomas Altas 11950 México, D.F.
Model number:	E14S
Supply voltage:	100 – 240 V CA
Frequency:	50/60 Hz
Current consumption:	10 A – 5 A (X 2)

📝 **NOTE:** (X#), # = maximum number of power supplies per system.

Technical Specifications

✎ **NOTE:** The following specifications are only those required by law to ship with your system. For a complete and current listing of the specifications for your system, go to **support.dell.com**.

Power

AC Power Supply (per power supply)	
Wattage	750 W
Heat dissipation	2891 BTU/hr maximum (750 W power supply)

✎ **NOTE:** Heat dissipation is calculated using the power supply wattage rating.

Voltage	100–240 V AC, autoranging, 50/60 Hz

✎ **NOTE:** This system is also designed to be connected to IT power systems with a phase to phase voltage not exceeding 230 V.

Battery	
Coin-cell battery	3 V CR2032 Lithium coin cell

Physical

Height	87.3 mm (3.44 inch)
Width	
With rack latches	482.4 mm (18.98 inch)
Without rack latches	444 mm (17.08 inch)
Depth (includes bezel)	755.8 mm (29.75 inch)
Weight (maximum)	31.86 kg (70.24 lb)
Weight (empty)	18.78 kg (41.4 lb)

Environmental

✎ **NOTE:** Your system is capable of 40 °C and 45 °C excursion operation for fresh air cooled data centers. For more information, see the *Owner's Manual* at **dell.com/support/manuals**.

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

Temperature	
Maximum Temperature Gradient (Operating and Storage)	20 °C/h (36 °F/h)
Storage Temperature Limits	−40 °C to 65 °C (−40 °F to 149 °F)
Temperature (Continuous Operation)	

Environmental

Environmental	
Temperature Ranges (for altitude less than 950 m or 3117 ft)	10 °C to 35 °C (50 °F to 95 °F) with no direct sunlight on the equipment.
Humidity Percentage Range	10% to 80% Relative Humidity with 26 °C (78.8 °F) maximum dew point.

Relative humidity

Storage	5% to 95% RH with 33 °C (91 °F) maximum dew point. Atmosphere must be non-condensing at all times.

Maximum vibration

Operating	0.26 G_{rms} at 5 Hz to 350 Hz (all operation orientations).
Storage	1.87 G_{rms} at 10 Hz to 500 Hz for 15 min (all six sides tested).

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 m 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 m.

Maximum Altitude

Operating	3048 m (10,000 ft).
Storage	12,000 m (39,370 ft).

Operating Altitude De-rating

Up to 35 °C (95 °F)	Maximum temperature is reduced by 1 °C/300 m (1 °F/547 ft) above 950 m (3,117 ft).
35 °C to 40 °C (95 °F to 104 °F)	Maximum temperature is reduced by 1 °C/175 m (1 °F/319 ft) above 950 m (3,117 ft).
40 °C to 45 °C (104 °F to 113 °F)	Maximum temperature is reduced by 1 °C/125 m (1 °F/228 ft) above 950 m (3,117 ft).

Particulate Contamination

NOTE: This section defines the limits to help avoid IT equipment damage and/or failure from particulates and gaseous contamination. If it is determined that levels of particulates or gaseous pollution are beyond the limits specified below and are the reason for the damage and/or failures to your equipment, it may be necessary for you to re-mediate the environmental conditions that are causing the damage and/or failures. Re-mediation of environmental conditions will be the responsibility of the customer.

Air Filtration	Data center air filtration as defined by ISO Class 8 per ISO 14644-1 with a 95% upper confidence limit.
	NOTE: Air entering the data center must have MERV11 or MERV13 filtration.

Environmental

> **NOTE:** Applies to data center environments only. Air filtration requirements do not apply to IT equipment designed to be used outside a data center, in environments such as an office or factory floor.

Conductive Dust	Air must be free of conductive dust, zinc whiskers, or other conductive particles.

> **NOTE:** Applies to data center and non-data center environments.

Corrosive Dust	• Air must be free of corrosive dust.

> **NOTE:** Applies to data center and non-data center environments.

- Air must be free of corrosive dust.
- Residual dust present in the air must have a deliquescent point less than 60% relative humidity.

Gaseous Contamination

> **NOTE:** Maximum corrosive contaminant levels measured at ≤50% relative humidity.

Copper Coupon Corrosion Rate	<300 Å/month per Class G1 as defined by ANSI/ISA71.04-1985.
Silver Coupon Corrosion Rate	<200 Å/month as defined by AHSRAE TC9.9.