Dell Storage Center

SCv300 and SCv320 Expansion Enclosure
Getting Started Guide

Notes, Cautions, and Warnings

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

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.

Setting Up the Expansion Enclosure

Before setting up your SCv300/SCv320 expansion enclosure, consider the following best practices.

- Before connecting any cables between the storage system and expansion enclosure, physically label each port and connector.
- Always follow proper power-up and power-down procedures when cycling power across the network. Verify that critical network components are on separate power circuits.

> **NOTE: This product is intended for restricted access locations, such as a dedicated equipment room or equipment closet.**

> ⚠ **WARNING: If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient temperature. Therefore, consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature (Tma) specified by the manufacturer.**

Other Information You May Need

To install the expansion enclosure, you may need the following additional information.

> **NOTE: See the safety and regulatory information that shipped with your Storage Center components. Warranty information is included as a separate document.**

- The *Dell Storage Center SCv3020 Storage System Deployment Guide* provides information about cabling storage system hardware components and configuring a new storage system using the Dell Storage Client.
- The *Dell Storage Manager Administrator's Guide* describes how to use Dell Storage Manager to manage Storage Center systems.
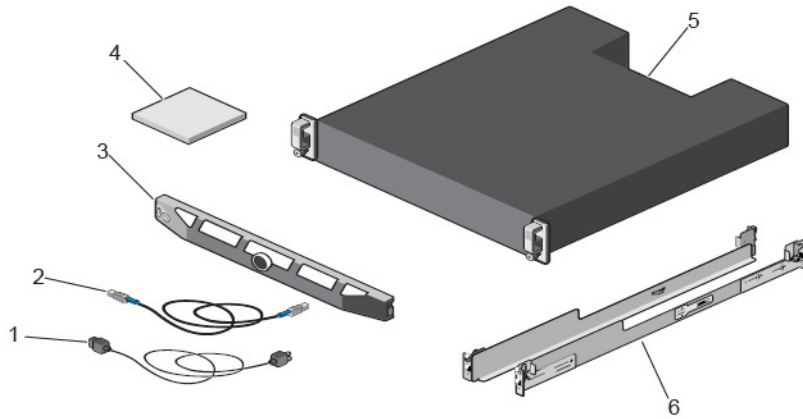
Installation and Configuration

Before you begin the installation, make sure that the site where you plan to install the expansion enclosure has standard power from an independent source or a rack power distribution unit with a UPS.

Unpacking Storage Center Equipment

Unpack the expansion enclosure and identify the items in your shipment.

**Figure 1. SCv300/SCv320 Expansion Enclosure Components**

1. Power cables
2. SAS cables
3. Front bezel
4. Documentation
5. Expansion enclosure
6. Rack rails (2)

Installing the Expansion Enclosure in a Rack

Install the SCv300/SCv320 expansion enclosure in a rack.

> **NOTE: Mount the expansion enclosure in a manner that allows for expansion in the rack and prevents the rack from becoming top-heavy.**

1. Assemble the rails, following the safety instructions and the rack installation instructions that were provided with your expansion enclosure.
2. Determine where to mount the expansion enclosure in the rack and mark the location.
3. Install the rack rails at the marked location.
4. Mount the expansion enclosure chassis on the rails.
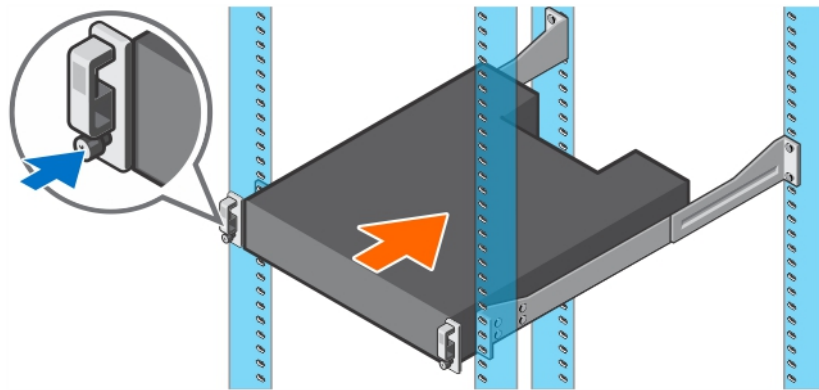

Figure 2. Mount the Expansion Enclosure Chassis in the Rack

5. Secure the expansion enclosure chassis to the rack using the mounting bolts.
   For more information about installing the expansion enclosure, contact Dell Technical Support Services.

Install the Front Bezel

Install the bezel on the front of the expansion enclosure.

1. Hook the right end of the bezel onto the expansion enclosure.
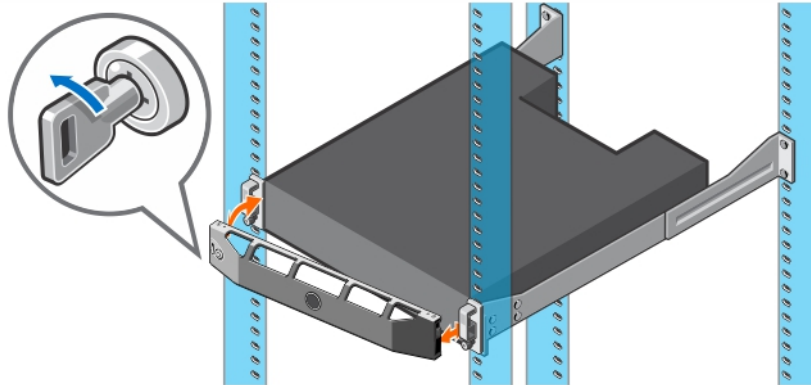
Figure 3. Front Bezel

2. Insert the left end of the bezel into the securing slot until the release latch snaps into place.
3. Secure the bezel with the keylock.

Connecting the Power Cables

Connect the power cables to the expansion enclosure.

1. Before connecting the power cables, make sure that the power switches on the expansion enclosure are in the OFF position.
2. Connect the power cables to the power supplies in the expansion enclosure chassis.
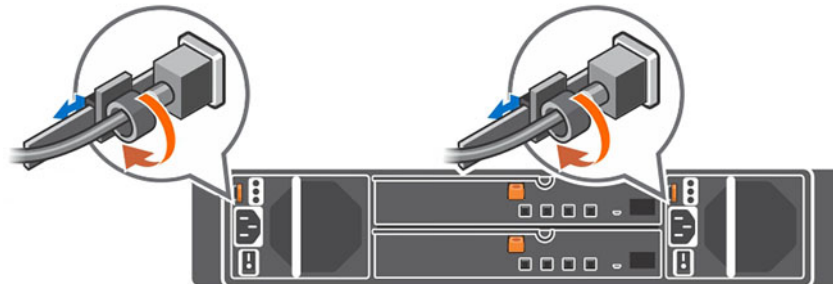
Figure 4. Power Cables

3. Secure each power cable to the expansion enclosure chassis using the strain relief fasteners.
4. Plug the other end of the power cables into a grounded electrical outlet or a separate power source such as an uninterrupted power supply (UPS) or a power distribution unit (PDU).

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 º Piso

	Col. Lomas Atlas 11950 México, D.F.
Model number	E03J and E04J
Supply voltage	100–240 VAC
Frequency	50/60 Hz
Current consumption	8.6–4.3 A

Technical Specifications

The technical specifications of the SCv300/SCv320 expansion enclosures are displayed in the following tables.

Drives	
SAS hard drives	**SCv300**: Up to 12 hot-swappable 3.5-inch 12 Gbps SAS hard drives or SAS solid state drives (SSDs)
	SCv320: Up to 24 hot-swappable 2.5-inch 12 Gbps SAS hard drives or SAS solid state drives (SSDs)
	NOTE: SCv300/SCv320 expansion enclosures support self-encrypting drives (SEDs).

Enclosure Management Modules (EMMs)	
EMMs	Two hot-swappable IO modules

Connectivity	
Configurations	Storage Center supports up to 960 drives in five redundant-path SAS chains
	An SCv3020 supports up to 16 SCv300 expansion enclosures or up to 8 SCv320 expansion enclosures per chain

Redundant Array of Independent Disks (RAID)	
Storage System	SCv3020
Management	RAID management using Dell Storage Client 2016 R3.10 and later

Back-Panel Connectors (per EMM)	
SAS connectors	Four mini-SAS HD connectors for connecting an expansion enclosure to a storage system.
	NOTE: SAS connectors are SFF-8086/SFF-8088 compliant.

LED Indicators	
Front panel	• One two-color LED indicator for system status • One single-color LED indicator for power status
Hard-drive carrier	• One single-color activity LED • One two-color LED status indicator per drive
Power supply/cooling fan	Three LED status indicators for power supply status, power supply module status, and AC status

Power Supplies

AC power supply (per power supply)

Wattage	600 W
Voltage	100–240 VAC (8.6–4.3 A), autoranging, 50/60 Hz
Heat dissipation	AC – 2047 BTU/hr

Available Hard Drive Power (per Slot)

Supported hard drive power consumption (continuous)	Up to 1.2 A at +5 V, up to 0.5 A at +12 V

Physical

Height	8.7 cm (3.43 in.)
Width	48.2 cm (18.98 in.)
Depth	**SCv300**: 59.4 cm (23.39 in.)
	SCv320: 54.1 cm (21.3 in.)
Weight (maximum configuration)	**SCv300**: 28.59 kg (63.03 lb)
	SCv320: 24.2 kg (53.35 lb)
Weight without drives	**SCv300**: 9.0 kg (19.84 lb)
	SCv320: 8.8 kg (19.4 lb)

Environmental

✏️ NOTE: For additional information about environmental measurements for specific configurations, see the **Product Safety, EMC and Environmental Datasheets** website.

Temperature

Operating	**SCv300**: 5° to 35°C (41° to 95°F) with a maximum temperature gradation of 10°C (18°F) per hour
	SCv320: 10° to 35°C (50° to 95°F) with a maximum temperature gradation of 10°C (18°F) per hour

> ✏️ NOTE: For altitudes above 900 m (2950 ft), the maximum operating temperature is derated 0.56°C (1°F) per 168 m (550 ft).

Storage	−40° to 65°C (−40° to 149°F) with a maximum temperature gradation of 20°C (36°F) per hour

Relative humidity

Operating	8% to 85% (noncondensing) with a maximum humidity gradation of 10% per hour
Storage	5% to 95% (noncondensing)

Altitude

Operating	−16 to 3048 m (−50 to 10,000 ft)

> ✏️ NOTE: For altitudes above 900 m (2950 ft), the maximum operating temperature is derated 0.56°C (1°F) per 168 m (550 ft).

Environmental

Storage	−16 to 10,600 m (−50 to 35,000 ft)