

Storage Center 5.5

System Setup Guide



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680-022-009

Revision	Date	Description
A	March 2011	Initial Release for Storage Center 5.5.2.
B	April 2011	Updated to include new locations for contacting Dell technical support and downloading product manuals.

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Preface

Purpose

This guide describes how to setting up a new Storage Center.

Related Publications

While using this guide, you may also want to refer to the following related publications:

- *Storage Center System Manager User Guide*
Provides instructions for using Storage Center System Manager to manage storage.
- *Storage Center System Manager Upgrade Guide*
Describes how to upgrade Storage Center software from version 4.5.6 and above to version 5 and from version 5.0 and higher to version 5.
- *Enterprise Manager User Guide*
Provides instructions for managing multiple Storage Centers.

To download Dell Compellent product manuals, go to:

<http://www.dell.com/manuals>

Contacting Dell Support Services

Please contact Dell Technical Support Services from the following address if you need support assistance:

<http://support.dell.com/compellent>

1 Getting Started

Pre-installation Documents

All hardware must be installed and cabled before you begin the setup and software installation process. If server connectivity is through Fibre Channel (FC), the FC switches must be configured and zoned before the controller/s are set up.

Your Storage Architect or Business Partner supplied pre-installation documents that include:

- List of hardware needed to support storage requirements
- Optional connectivity diagrams to illustrate cabling between the controllers, enclosures, network, and servers
- Optional network information, such as IP addresses, subnet masks, gateways, and so forth

Refer to these documents for information about site-specific settings that will be used during controller configuration described in [Setting Up a Controller on page 3](#).

About Virtual Ports

Because Virtual Ports change IO ports from a physical to a virtualized representation, they eliminate the need for reserve ports. All ports within a network or fabric are Primary and can read and write IO. If a physical port fails, any Virtual Port in the same fabric can take over for the failed port. Because each Virtual Port has a preferred Physical port association; the virtual port returns to its preferred Physical port when the system is rebalanced.

You may want to define a Virtual Port configuration before you start the Storage Center Startup Wizard. However, if there is no Virtual Port configuration defined, [Step 12: Configure Ports on page 24](#) allows you to skip configuring ports during initial setup.

If you have not used virtualization before, refer to [Virtual Storage and Virtual Ports on page 49](#) for an introduction to Virtual Storage and Virtual Ports.

System Power Up

Power on the system by pressing the power switches in the following order.

- 1 Power up each enclosure. Simultaneously press the two power switches on the rear of each enclosure.
- 2 Wait several minutes until the drives spin up.
- 3 After all drives in the enclosure spin up, power up each controller by pressing the power button on the front of the enclosure.

Note Always power up disk drive enclosures before powering up the controllers.

After powering on the Storage Center, go to [Setting Up the Storage Center on page 3](#) to continue the setup.

2 Setting Up the Storage Center

Setting Up a Controller

Once hardware has been racked and cabled and any FC switches that provide server connectivity have been configured and zoned, you configure and identify a controller. Configuring a controller includes the following tasks:

- [Connect to a Controller on page 3](#)
- [Reset Hardware and System Serial Numbers on page 4](#)
- [Set IP Addresses on page 5](#)

If you have a dual-controller system, you will configure both controllers using the serial connection. For documentation purposes we call the controller you assign the lower serial number as Controller 1 and the other as Controller 2. Configure Controller 1 and then configure Controller 2.

Connect to a Controller

⇒ *To connect to a controller*

- 1 Using a DB9 cable, connect a PC or laptop to a Storage Center controller DB9 serial port. (To connect from a USB port, use a USB to DB9 converter.)
- 2 Power up the PC.
- 3 Open a terminal emulator or a command line interface. Configure the connection as follows:

Setting	Value
Emulation	VT220
Column Mode	132
Line Wrapping	Off
Connection	Serial Port
Connection Type	Direct
Baud Rate	115,200

Setting	Value
Parity	None
Data Bits	8
Stop Bits	1
Flow Control	Hardware or default

Note You should also enable logging as the logs will be helpful if Copilot support is needed.

- 4 Press **Enter** several times to initiate the connection. The terminal echoes back to indicate that connectivity has been established. If the prompt is not displayed, verify the communications settings or cabling.

Reset Hardware and System Serial Numbers

- 1 Once you establish connection to a controller via the terminal software, view the current serial numbers by entering the following console command:

`controller show`
- 2 For Controller 1, change the current Hardware Serial Number (HSN) and System Serial Number (SSN) to the HSN and SSN listed in your pre-installation documents. For more information about pre-installation documents, refer to [Pre-installation Documents on page 1](#).

Note The following commands are for a *new installations only*. Using the `cs purge all` command on an existing Storage Center deletes the existing configuration and can make data inaccessible.

On the terminal screen, enter:

```
shellaccess developer
platform init hsn set [new HSN]
platform init ssn set [new SSN]
cs purge all
-reset
```

- 3 The controller takes several minutes to reset. If you are near the controller, you can hear it power down and reboot.

Note The controller may reboot more than once. This is normal.

- 4 From the `controller show` command output, write down the factory default **eth1** addresses from each controller. If you are setting up a dual system, the **eth1** address from controller 2 will be needed during the setup process.