

IBM System Storage SAN Volume Controller



Installation and configuration overview

SAN Volume Controller installation and configuration overview

The installation and configuration of a SAN Volume Controller cluster requires some tasks that the customer typically completes and other tasks that an IBM service representative performs.

Additional publications are included with some of the hardware components; however, use the installation and configuration procedures in the documents that are listed here.

When you plan or perform the installation and configuration tasks, have the following SAN Volume Controller publications available:

- *IBM System Storage SAN Volume Controller: Planning Guide*, GA32-0551
- *IBM System Storage SAN Volume Controller: Hardware Installation Guide*, SC26-7904
- *IBM System Storage SAN Volume Controller: Software Installation and Configuration Guide*, SC23-6628

To access the SAN Volume Controller publications, click the product documentation link and then click your language from the following Web site:

<http://www.ibm.com/storage/support/2145>

IBM System Storage Productivity Center (SSPC) replaces the master console for new installations of SAN Volume Controller version 4.3.0. For SSPC planning, installation, and configuration information, see the following publications:

- *IBM System Storage Productivity Center Introduction and Planning Guide*, SC23-8824
- *IBM System Storage Productivity Center Hardware Installation and Configuration Guide*, SC23-8822
- *IBM System Storage Productivity Center Software Installation and User's Guide*, SC23-8823

To access the SSPC publications, go to the **Printable PDFs** section and click the **IBM System Storage Productivity Center** link from the following Web site:

<http://publib.boulder.ibm.com/infocenter/tivihelp/v4r1/index.jsp>

Note: An existing master console can be upgraded to support clusters that are running the latest SAN Volume Controller software. Appendix E of the *IBM System Storage SAN Volume Controller: Software Installation and Configuration Guide* provides instructions for maintaining and upgrading the master console software.

Planning tasks that customers complete before the installation

Before the installation can begin, either the customer must complete the following planning tasks or have a service contract with IBM or an IBM Business Partner to have them completed:

1. **Verify that all the SAN Volume Controller installation requirements have been met.**

Review Chapter 2 of the *IBM System Storage SAN Volume Controller: Planning Guide* to make sure that space and power requirements have been met before

you begin the installation. This might include preparing for installation of an SSPC, which is described in the *IBM System Storage Productivity Center Introduction and Planning Guide*.

2. **Review SAN fabric and zoning guidelines and develop your SAN Volume Controller cluster, host systems, and storage controllers plan.**

This task helps assure a seamless configuration. For more information, see Chapters 3 and 4 of the *IBM System Storage SAN Volume Controller: Planning Guide*.

3. **Complete all physical planning charts.**

For the SSPC, complete the planning worksheet in the Appendix of the *IBM System Storage Productivity Center Introduction and Planning Guide*.

Chapter 2 of the *IBM System Storage SAN Volume Controller: Planning Guide* provides instructions for accessing and completing the following charts and tables:

- Hardware location chart
- Cable connection table
- Configuration data table
- Redundant ac power connection chart

The SAN Volume Controller charts and tables are available from the following Web site:

<http://www.ibm.com/storage/support/2145>

You can save, edit, and share the charts and tables between members of the installation team.

Hardware installation tasks that an IBM service representative performs

To install the SAN Volume Controller hardware, the IBM service representative must complete the following tasks:

1. **Check to make sure that you have all the parts that you need for the installation.**

Chapter 6 of the *IBM System Storage SAN Volume Controller: Hardware Installation Guide* provides a list of all the parts that are required for an installation. The list includes the SAN Volume Controller nodes, uninterruptible power supply units, optional redundant ac power switches, and associated parts.

2. **Install the SAN Volume Controller hardware.**

Chapter 6 of the *IBM System Storage SAN Volume Controller: Hardware Installation Guide* describes the procedures for installing the uninterruptible power supply units, SAN Volume Controller nodes, and the optional redundant ac power switches.

3. **Install the SSPC server, including the SAN Volume Controller Console software.**

The *IBM System Storage Productivity Center Hardware Installation and Configuration Guide* describes how to install and configure the SSPC hardware.

An updated version of the SAN Volume Controller CIM Agent and GUI software might be available. For the latest information, click the **Install/use** tab and then click the link for the appropriate recommended software level from the following Web site:

<http://www.ibm.com/storage/support/2145>

Additionally, preinstalled software on the SSPC console might need to be updated to fully support the latest level of SAN Volume Controller. For the latest information, go to the following Web site:

<http://www.ibm.com/systems/support/storage/software/sspc>

“Accessing the SAN Volume Controller Console” in Chapter 4 of the *IBM System Storage SAN Volume Controller: Software Installation and Configuration Guide* describes how to access and log on to the SAN Volume Controller Console.

Configuration tasks that a customer performs

To configure the SAN Volume Controller cluster, the customer must either complete the following tasks or have a service contract with IBM or an IBM Business Partner to have them completed:

1. Configure the IBM System Storage Productivity Center.

Chapter 3 of the *IBM System Storage Productivity Center Software Installation and User's Guide* describes the procedures for configuring the server and accessing the SAN Volume Controller Console and command-line interface (CLI). This chapter also describes how to use the PuTTY client to generate secure shell (SSH) key pairs that secure data flow between the SAN Volume Controller cluster configuration node and a client.

2. Create a SAN Volume Controller cluster.

Chapter 4 of the *IBM System Storage SAN Volume Controller: Software Installation and Configuration Guide* describes this procedure, which is completed in two phases:

- a. Use the Create Cluster option on the front panel of one of the SAN Volume Controller nodes that you have installed to create the cluster.

This procedure is usually performed by an IBM representative or IBM Business Partner using information that the customer provides.

- b. Use the Add a Cluster function from the SAN Volume Controller Console.

3. Complete the initial SAN Volume Controller configuration.

After you create the SAN Volume Controller cluster, you must perform basic configuration procedures. Such procedures include adding nodes to a cluster, setting cluster date and time, setting the license features, creating host definitions, assigning managed disks to managed disk groups, setting up virtual disks and assigning them to hosts, and setting call home and SNMP event notification. The following chapters include procedures for these tasks:

- Chapter 5 of the *IBM System Storage SAN Volume Controller: Software Installation and Configuration Guide* describes how to perform these steps using the SAN Volume Controller Console.
- Chapter 6 of the *IBM System Storage SAN Volume Controller: Software Installation and Configuration Guide* describes how to perform these steps using the CLI.