



Product Overview

The Cisco SN 5420 storage router installation and configuration tasks consist of the following:

- Install the SN 5420 storage router according to the *Cisco SN 5420 Storage Router Hardware Installation Guide* (this manual).
- Configure the SN 5420 storage router software according to the *Cisco SN 5420 Storage Router Software Configuration Guide*.
- Install and configure the Cisco SN iSCSI server drivers according to the README and example configuration files on the Cisco Storage Networking iSCSI Drivers CD shipped with your SN 5420 storage router. (In addition, you can access README and example configuration files from Cisco.com.)

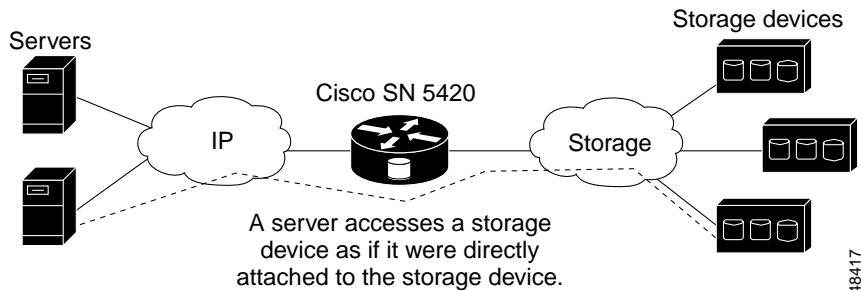
This chapter is the starting point for installing the SN 5420 storage router hardware. The chapter provides some very basic information you should know before proceeding to other chapters in this manual and contains the following topics.

- [SN 5420 Basic Description, page 1-2](#)
- [Gigabit Ethernet Port, page 1-3](#)
- [Fibre Channel Port, page 1-3](#)
- [Management Ports, page 1-4](#)
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SN 5420 Basic Description

The SN 5420 storage router provides servers with IP access to storage through SCSI routing using iSCSI protocol. With SCSI routing, servers use an IP network to access storage as if the servers were directly attached to the storage devices. (See [Figure 1-1](#).)

Figure 1-1 SCSI Routing with the SN 5420 Storage Router

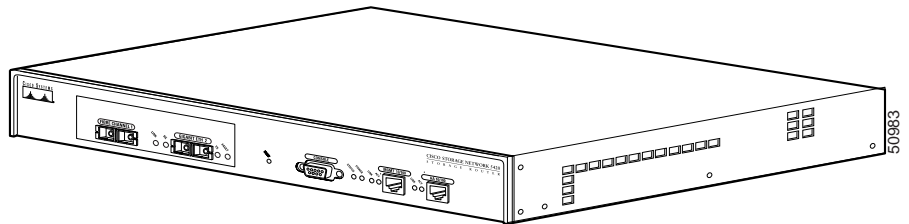


Note

The iSCSI protocol is an IETF-defined protocol for IP storage (ips). For more information about the iSCSI protocol, refer to the IETF standards for IP storage at <http://www.ietf.org>.

The SN 5420 storage router is a 1U rack-mountable chassis that has one Gigabit Ethernet port, one Fibre Channel port, two management ports, one High Availability (HA) port, and a power connector. [Figure 1-2](#) shows a front view of the SN 5420 chassis.

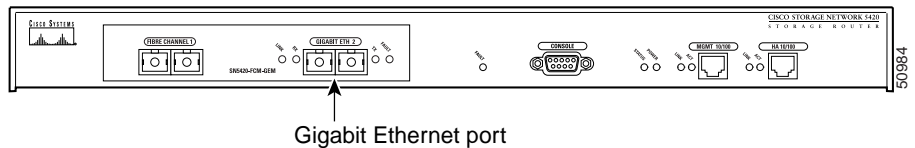
Figure 1-2 SN 5420 Storage Router Chassis



Gigabit Ethernet Port

The Gigabit Ethernet port, labeled GIGABIT ETH 2, is a 1000BASE-SX (short-wavelength) interface for connecting to servers requiring IP access to storage. (See [Figure 1-3](#).) The port uses a duplex SC connector and has LEDs indicating its status.

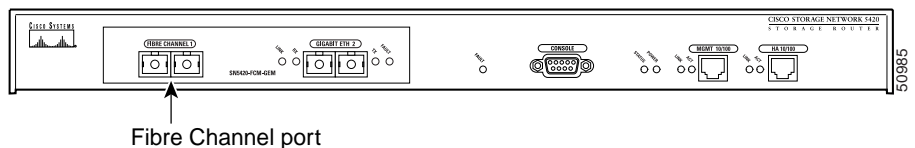
Figure 1-3 Gigabit Ethernet Port, GIGABIT ETH 2



Fibre Channel Port

The Fibre Channel port, labeled FIBRE CHANNEL 1, is a 100-M5-SN-I / 100-M6-SN-I interface for connecting to storage controllers on a Fibre Channel network. (See [Figure 1-4](#).) The Fibre Channel port functions as either a Fibre Channel N_Port or NL_Port, supporting point-to-point, loop, and fabric topologies. The port uses a duplex SC connector.

Figure 1-4 Fibre Channel Port, FIBRE CHANNEL 1

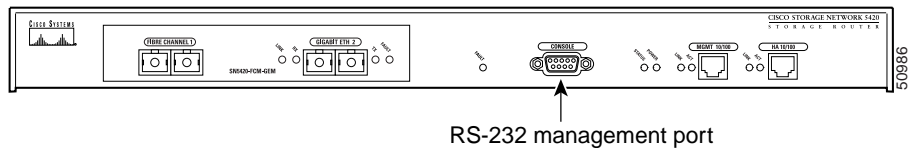


Management Ports

The SN 5420 storage router has two management ports: an RS-232 port for local console access and a 10/100 Ethernet port for network access.

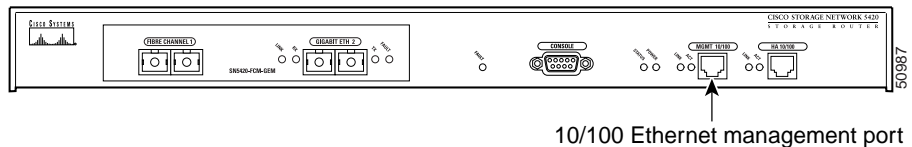
The RS-232 management port, labeled **CONSOLE**, is serial interface for connecting to a serial port of a PC running terminal emulation software. (See [Figure 1-5](#).) Using the RS-232 management port you can manage the storage router using the SN 5420 command-line interface (CLI). The port uses a male DB-9 connector.

Figure 1-5 RS-232 Management Port, CONSOLE



The 10/100 Ethernet management port, labeled **MGMT 10/100**, is a 10/100 Ethernet interface for connecting to a 10/100 Ethernet management network. (See [Figure 1-6](#).) Through a management network you can manage the storage router using the CLI, the web-based GUI, or SNMP. The port uses an RJ-45 connector and has LEDs indicating its status.

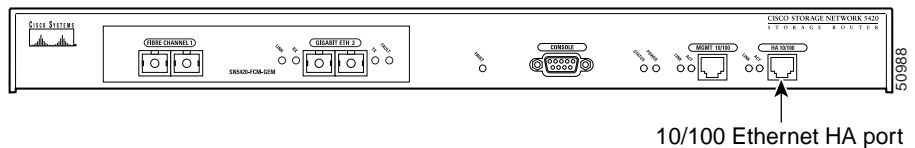
Figure 1-6 10/100 Ethernet Management Port, MGMT 10/100



High Availability (HA) Port

The High Availability (HA) port, labeled HA 10/100, is a 10/100 Ethernet interface for connecting to a 10/100 Ethernet HA network. (See [Figure 1-7](#).) The 10/100 Ethernet HA port allows the SN 5420 to function in a two-node cluster with another SN 5420 to provide fault-tolerant operation. The 10/100 Ethernet HA port uses an RJ-45 connector and has LEDs indicating its status.

Figure 1-7 10/100 Ethernet HA Port, HA 10/100



Front-Panel LEDs

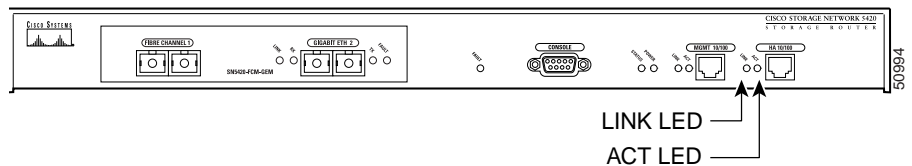
The following LEDs are located on the front panel:

- FAULT
- STATUS
- POWER
- Gigabit Ethernet port LEDs
- 10/100 Ethernet management port LEDs
- 10/100 Ethernet HA port LEDs

The FAULT, STATUS, and POWER LEDs indicate the status of the SN 5420 storage router. The FAULT LED is located to the left of the RS-232 management port. The STATUS and POWER LEDs are located to the right of the RS-232 management port. [Figure 1-8](#) shows the locations of the LEDs.

The 10/100 Ethernet HA port has two LEDs, labeled LINK and ACT, that indicate the status of that port. The LEDs are located to the left of the 10/100 Ethernet HA port. [Figure 1-11](#) shows the locations of the 10/100 Ethernet HA port LEDs.

Figure 1-11 10/100 Ethernet HA Port LEDs



[Table 1-1](#) describes the LEDs.

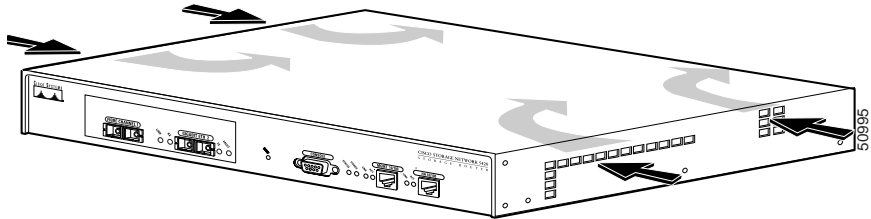
Table 1-1 LED Descriptions

LED		Color	Description
FAULT		Red	Error condition in storage router.
STATUS		Green	On after successful boot up.
		Yellow	Flashing during boot up.
POWER		Green	Power is on.
Gigabit Ethernet	LINK	Green	Port is operational.
	RX	Green	Packets are being received.
	TX	Green	Packets are being transmitted.
	FAULT	Red	Error condition with port.
10/100 Ethernet Management	LINK	Green	Port is operational.
	ACT	Green	Packets are being transmitted or received.
10/100 Ethernet HA	LINK	Green	Port is operational.
	ACT	Green	Packets are being transmitted or received.

Fan Assembly

The fan assembly provides cooling air for the internal chassis components. The fan exhausts air from the rear, and fresh air is drawn in from the sides of the chassis. (See [Figure 1-12](#).)

Figure 1-12 Chassis Airflow



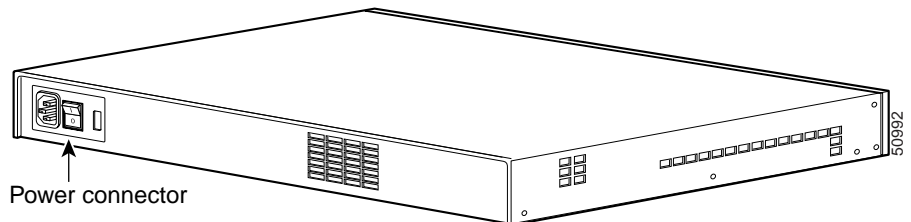
Power Supply

The SN 5420 storage router has an internal power supply that monitors its temperature and output voltages. If conditions reach critical thresholds, the power supply will shut down to avoid damage from excessive heat or electrical current.

The power supply connects to site power through a power cord and the power connector on the rear panel of the SN 5420 storage router (See [Figure 1-13](#)). The power connector houses the following components: a power receptacle, a power switch, a voltage selector (and indicator), and a cover. (See [Figure 1-14](#).)

[Table 1-2](#) describes the power connector components.

Figure 1-13 Rear Panel, Power Connector



Power connector

Figure 1-14 Power Connector Components

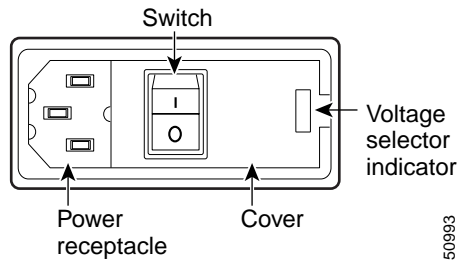


Table 1-2 Power Connector Components

Component	Description
Power Receptacle	Connects to input power cord.
Power Switch	A rocker switch that is labeled with I and O. Pressing I switches power on. Pressing O switches power off.
Voltage Selector (and indicator)	Provides the ability to select either of the following input voltages: 115 VAC/60 Hz or 230 VAC/50 Hz. The selected voltage is indicated by a label—either 115V or 230V—that is visible through a cutout in the cover. The factory setting is 115V. See Chapter 2 for the procedure on changing the voltage selector setting.
Cover	A hinged cover that provides access to the voltage selector if the voltage selector setting needs to be changed.

