

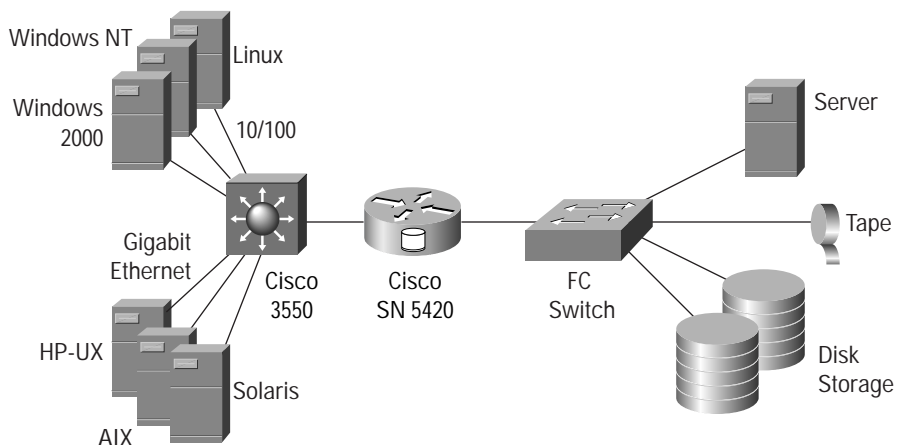
Cisco SN 5420 Storage Networking Router

The Cisco SN 5420 implements the Internet Small Computer Systems Interface (iSCSI) to provide access to Fibre Channel switches and storage devices. iSCSI combines the benefits of the TCP/IP protocol suite with SCSI, the universal standard for storage access (refer to Figure 1). By utilizing iSCSI, the Cisco SN 5420 Storage Router extends your Fibre Channel storage network to lower-priced/ lower-performance servers in your data center and departmental servers located throughout your campus and enterprise. With the Cisco SN 5420, you can access your Fibre Channel storage-area network (SAN) from anywhere on an IP network as easily as accessing direct-attached storage (refer to Figure 2). By taking advantage of the cost advantages of 10/100 Ethernet networks or the performance advantages of Gigabit Ethernet, the Cisco SN 5420 Storage Router can connect servers to your shared Fibre Channel storage pool that would have previously been cost-prohibitive.

Figure 1
 Cisco SN 5420 Storage Router



Figure 2
 Cisco SN 5420 Extends Your Fibre Channel Storage to the IP Network.





Compare the Features

- Provides access to Fibre Channel storage across IP networks through iSCSI technology
- Offers iSCSI draft standards-compatible hardware and drivers
- Provides Fibre Channel and Gigabit Ethernet interfaces
- High-availability design provides continuous access to critical data
- Has small footprint (one rack unit) form factor (rack-mount or table-top)
- Offers full interoperability with other Cisco Catalyst® switches, Cisco routers, and optical routers
- Uniquely provides standard IP networking capabilities to storage environments
- Offers extensive security features to protect valuable storage resources
- Offers fully integrated management tools
- Offers ease of use through standard Cisco user interfaces and configuration tools

Key Benefits

- The Cisco SN 5420 Storage Router offers block-level access to storage through an IP network.
- Existing applications run without modification.
- High-availability features provide maximum uptime for mission-critical applications.
- Standard network management tools enhance the ability to manage storage, reducing storage-management costs.
- The Cisco SN 5420 Storage Router extends the storage network to IP.
- The Cisco SN 5420 Storage Router offers iSCSI drivers for the following operating systems: Windows NT, Windows 2000, Solaris, Linux, HP-UX, and AIX.
- The Cisco SN 5420 Storage Router offers security by taking advantage of IP virtual LAN (VLAN) support (refer to Figure 3).
- Further security is implemented in the Cisco SN 5420 through authentication during the iSCSI login sequence (refer to Figure 4).
- The Cisco SN 5420 Storage Router offers manageability by utilizing the Simple Network Management Protocol (SNMP) along with CiscoWorks 2000 and the Cisco Discovery Protocol.

Figure 3
VLAN Security Support

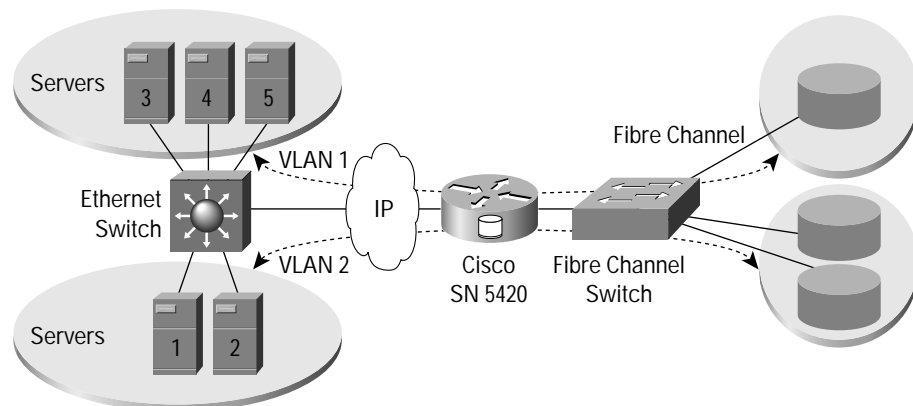
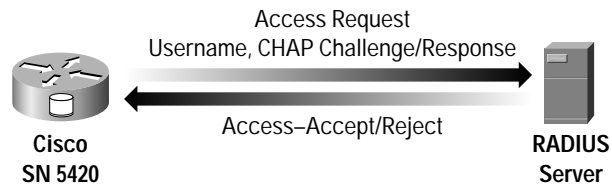




Figure 4
Authentication During the iSCSI Login Sequence



When to Sell

Sell the Cisco SN 5420 Storage Router in the following situations:

- When the customer requires an application that utilizes SCSI today to access local storage—Such an application can benefit from universal access to storage using the IP protocol. Some applications require file-level access to storage. In those cases, a network-attached storage (NAS) device may be a better solution.
- When the customer wants to take advantage of the previous investment in a Fibre Channel SAN—The Cisco SN 5420 can cost-effectively expand that storage to any server through the IP network.
- When the customer requires the ability to control access to a common storage pool, such as in a SAN—This is a common requirement with storage service providers. The Cisco SN 5420 has logical unit number (LUN) mapping and access control lists to control access to storage devices.
- When the customer requires performance requirements consistent with applications such as tape backup over an IP network—The Cisco SN 5420 provides an ideal solution for these environments.
- When the customer wants IP access to storage across a wide-area network (WAN) or IP accessibility to storage pools

Competitive Pitfalls

Nishan Systems

- Shipping an 8- and 16-port IP storage switch supporting the IP storage protocols iFCP and iSCSI
- Announced wire-speed iSCSI performance on current platform
- Relies on third-party vendors for iSCSI support and drivers

Pirus

- Pirus has announced its PSX-1000 switch.
- The PSX-1000 is an all-in-one device.
- The Cisco solution, a Cisco Catalyst switch and a Cisco SN 5420, will compete favorably with the PSX-1000.

More iSCSI Competition

- Many more iSCSI competitors expected in 2002: Brocade, CNT, Crossroads, Inrange, McData, SANRad



Ordering Information

Part Number—Product	Description
<i>Chassis</i> SN5420-FCM-GEM	<ul style="list-style-type: none"> • Cisco SN 5420, one Fibre Channel interface with multimode optics, one Gigabit Ethernet interface with multimode optics
SN5420-HA	<ul style="list-style-type: none"> • Cisco SN 5420 Storage Router High-Availability Bundle
<i>Drivers and Firmware</i> SN iSCSI DRV 1.x	<ul style="list-style-type: none"> • Cisco iSCSI drivers that support the Cisco SN 5420 1.0 Firmware: Windows NT, Windows 2000, Linux, Solaris, HP-UX, AIX
SN iSCSI DRV 2.x	<ul style="list-style-type: none"> • Cisco iSCSI drivers that support the Cisco SN 5420 1.0 Firmware: Windows NT, Windows 2000, Linux, Solaris

Part Number Cisco SMARTnet™ Support	Description
CON-SNT-SN5420 SMARTnet support	<ul style="list-style-type: none"> • 24 x 7 access to the Cisco Technical Assistance Center (TAC) • 24 x 7 access to the TAC Web site, online software library, knowledge bases, and tools • Major and minor software upgrades and updates of Cisco IOS® Software via the TAC Web site or media • Advance hardware parts replacement (response times vary, depending on service level chosen below) • Delivery of hardware replacement parts by the next business day, if the request is received before 3 p.m. local time, Monday through Friday 8 to 5
CON-SNTE-SN5420 SMARTnet 8x5x4¹	<ul style="list-style-type: none"> • Cisco SMARTnet deliverables listed above • Delivery of hardware replacement parts on the same day within 4 hours, Monday through Friday 8 to 5
CON-SNTP-SN5420 SMARTnet 24x7x4¹	<ul style="list-style-type: none"> • Cisco SMARTnet deliverables listed above • Delivery of hardware replacement parts on the same day within 4 hours, 24 x 7
CON-OS-SN5420 SMARTnet Onsite	<ul style="list-style-type: none"> • Cisco SMARTnet deliverables listed above • Field engineer provided to install hardware replacement parts by next business day, Monday through Friday 8 to 5
CON-OSE-SN5420 SMARTnet Onsite 8x5x4²	<ul style="list-style-type: none"> • Cisco SMARTnet deliverables listed above • Field engineer provided to install hardware replacement parts on the same day within 4 hours, Monday through Friday 8 to 5
CON-OSP-SN5420 SMARTnet Onsite 24x7x42	<ul style="list-style-type: none"> • Cisco SMARTnet deliverables listed above • Field engineer provided to install hardware replacement parts on the same day within 4 hours, 24 x 7

¹Availability for Cisco SMARTnet 8x5x4 and SMARTnet 24x7x4 is restricted to within one hundred (100) miles of a rapid response depot (in the U.S.) and seventy-five (75) kilometers (outside the U.S.) of a rapid response depot. Advance Replacement 8x5x4 and 24x7x4 Services are not available for Hardware cabinetry or chassis over 50 lb (23 kg), Software, or consumables (cables, blower assemblies, power cords, mounting hardware, etc). To determine if this service is available for a customer's location, please see the Cisco Service Availability matrix at www.cisco.com/public/scc/

²Availability for Cisco SMARTnet Onsite 8x5x4 and SMARTnet Onsite 24x7x4 is restricted to within fifty (50) miles of an authorized service location and one hundred (100) miles of a parts depot (in the U.S.) and seventy-five (75) kilometers (outside the U.S.) of an authorized service location. To determine if this service is available for a customer's location, please see the Cisco Service Availability matrix at www.cisco.com/public/scc/

CISCO SYSTEMS



Corporate Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-4000
800 553-NETS (6387)
Fax: 408 526-4100

European Headquarters
Cisco Systems Europe
11 Rue Camille Desmoulins
92782 Issy-les-Moulineaux
Cedex 9
France
www-europe.cisco.com
Tel: 33 1 58 04 60 00
Fax: 33 1 58 04 61 00

Americas Headquarters
Cisco Systems, Inc.
170 West Tasman Drive
San Jose, CA 95134-1706
USA
www.cisco.com
Tel: 408 526-7660
Fax: 408 527-0883

Asia Pacific Headquarters
Cisco Systems, Inc.
Capital Tower
168 Robinson Road
#22-01 to #29-01
Singapore 068912
www.cisco.com
Tel: +65 317 7777
Fax: +65 317 7799

Cisco Systems has more than 200 offices in the following countries and regions. Addresses, phone numbers, and fax numbers are listed on the
Cisco Web site at www.cisco.com/go/offices

Argentina • Australia • Austria • Belgium • Brazil • Bulgaria • Canada • Chile • China PRC • Colombia • Costa Rica • Croatia
Czech Republic • Denmark • Dubai, UAE • Finland • France • Germany • Greece • Hong Kong SAR • Hungary • India • Indonesia • Ireland
Israel • Italy • Japan • Korea • Luxembourg • Malaysia • Mexico • The Netherlands • New Zealand • Norway • Peru • Philippines • Poland
Portugal • Puerto Rico • Romania • Russia • Saudi Arabia • Scotland • Singapore • Slovakia • Slovenia • South Africa • Spain • Sweden
Switzerland • Taiwan • Thailand • Turkey • Ukraine • United Kingdom • United States • Venezuela • Vietnam • Zimbabwe

All contents are Copyright © 1992–2002, Cisco Systems, Inc. All rights reserved. SMARTnet is a trademark, and Catalyst, Cisco, Cisco IOS, Cisco Systems, and the Cisco Systems logo are registered trademarks of Cisco Systems, Inc. and/or its affiliates in the U.S. and certain other countries.

All other trademarks mentioned in this document or Web site are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company.
(0203R) LW3071 03/02