



C Commands

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cdp enable

To enable Cisco Discovery Protocol (CDP) on the storage router, use the **cdp enable** command. To disable CDP on the storage router, use the **no** form of this command.

cdp enable

no cdp enable

Syntax Description This command has no arguments or keywords.

Defaults CDP is enabled.

Command Modes Administrator.

Command History	Release	Modification
	2.2.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines CDP is enabled by default in order to send or receive CDP information. CDP can be switched on or off for each specific interface via the **cdp interface** command.

Examples The following example enables CDP on the storage router:

```
[SN5428-2A]# cdp enable
```

Related Commands	Command	Description
	cdp holdtime	Specify the amount of time the receiving device should hold a CDP packet from the storage router before discarding it.
	cdp interface	Switch CDP on or off for the specified interface.
	cdp timer	Specify the amount of time between transmissions of CDP packets from the storage router.

cdp holdtime

To specify the amount of time the receiving device should hold a CDP packet from the storage router before discarding it, use the **cdp holdtime** command. To revert to the default setting, use the **no** form of this command.

cdp holdtime *nn*

no cdp holdtime

Syntax Description

<i>nn</i>	The holdtime to be sent in the CDP update packets, in seconds.
-----------	--

Defaults

The default holdtime is 180 seconds.

Command Modes

Administrator.

Command History

Release	Modification
2.2.1	This command was introduced for the SN 5428.
3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines

The CDP holdtime must be set to a higher number of seconds than the time between CDP transmissions, which is set using the **cdp timer** command.

Examples

The following example sets the CDP holdtime to 60, meaning that the CDP packet being sent from the storage router should be held by the receiving device for 60 seconds before being discarded. You may want to set the holdtime lower than the default setting of 180 seconds if information about the storage router changes frequently.

```
[SN5428-2A]# cdp holdtime 60
```

Related Commands

Command	Description
cdp enable	Enable or disable CDP on the storage router.
cdp interface	Switch CDP on or off for the specified interface.
cdp timer	Specify the amount of time between transmissions of CDP packets from the storage router.

cdp interface

To enable CDP for a specific interface, use the **cdp interface** command. To disable CDP for a specific interface, use the **no** form of this command.

cdp interface *if-name* **enable**

no cdp interface *if-name* **enable**

Syntax Description

<i>if-name</i>	The name of the interface for which you are enabling or disabling CDP. CDP can be enabled on the management (mgmt), HA, and Gigabit Ethernet (ge2) interfaces. When you type the cdp interface ? command, the CLI lists the interfaces available. You cannot specify a nonexistent interface.
enable	Keyword used to enable CDP for the specified interface.

Defaults

CDP is enabled for all interfaces.

Command Modes

Administrator.

Command History

Release	Modification
2.2.1	This command was introduced for the SN 5428.
3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines

CDP must be enabled for the storage router (using the **cdp enable** command or the equivalent GUI functionality) before it can be enabled for a specific interface.

Examples

The following example enables CDP for the Gigabit Ethernet interface, *ge2*:

```
[SN5428-2A]# cdp interface ge2 enable
```

The following example disables CDP for the management interface:

```
[SN5428-2A]# no cdp interface mgmt enable
```

Related Commands

Command	Description
cdp enable	Enable or disable CDP on the SN 5428-2 Storage Router.
cdp holdtime	Specify the amount of time the receiving device should hold a CDP packet from the storage router before discarding it.
cdp timer	Specify the amount of time between transmissions of CDP packets from the storage router.

cdp timer

To specify the amount of time between transmissions of CDP packets from the storage router, use the **cdp timer** command. To revert to the default setting, use the **no** form of this command.

cdp timer *nn*

no cdp timer

Syntax Description	<i>nn</i>	The number of seconds between transmissions of CDP packets from the storage router.
---------------------------	-----------	---

Defaults	The default is 60 seconds.
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Command Modes	Administrator.
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Command History	Release	Modification
	2.2.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines	The time between CDP transmissions must be set to a lower number than the CDP holdtime, which is set using the cdp holdtime command. There is a trade-off between sending more frequent CDP updates and bandwidth utilization.
-------------------------	---

Examples	The following example sets the CDP timer to 90, meaning that CDP updates are sent every 90 seconds, which is less frequently than the default of 60 seconds. You may want to make this change if you are concerned about preserving bandwidth.
-----------------	--

```
[SN5428-2A]# cdp timer 90
```

Related Commands	Command	Description
	cdp enable	Enable or disable CDP on the storage router.
	cdp holdtime	Specify the amount of time the receiving device should hold a CDP packet from the storage router before discarding it.
	cdp interface	Switch CDP on or off for the specified interface.

clear conf

To return certain configuration settings to factory defaults, use the **clear conf** wizard. The **clear conf** wizard prompts you to enter the Administrator mode password and then to indicate which settings to restore to factory defaults.

clear conf

Syntax Description This command has no arguments or keywords.

Defaults None.

Command Modes Administrator.

Command History	Release	Modification
	2.2.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines The **clear conf** wizard is only available when the storage router is deployed for SCSI routing. If the storage router is deployed for transparent SCSI routing, use the **clear conf {all | system}** command to return the storage router configuration to factory default settings.

Follow these guidelines when using the **clear conf** wizard:

- Select **apps** to remove all SCSI routing instances but retain system configuration settings.
- Select **system** to remove all SCSI routing instances and system configuration settings.
- Select **saved** to delete all backup configuration files from disk.
- Select **all** to remove all SCSI routing instances, system configuration settings, and saved configuration files.

The system will reboot if you select **apps**, **system**, or **all**.

System configuration settings include:

- The management and HA interface IP addresses
- Configuration information for Fibre Channel interfaces
- Saved zone configuration information
- Domain name servers
- NTP server and time zone information
- SNMP information
- Administrator and Monitor passwords, and administrator contact information
- AAA authentication configuration information
- VLAN and VTP information

Deleting system configuration makes the storage router unavailable to Telnet, SSH or web-based GUI sessions until the management interface is reconfigured with an IP address via a console connection. Refer to the appropriate *Cisco Storage Router Software Configuration Guide* for your storage router model for more information about initial system configuration.

**Note**

The **clear conf** wizard will not reset any Secure Shell (SSH) public and private key pairs generated for the storage router. Use the **ssh keygen** command to generate new SSH keys after the storage router is restored to the selected factory default settings.

Examples

The following example removes all SCSI routing instances from the storage router. The system configuration settings are retained.

```
[SN5428-2_A1]# clear conf
```

```
Enter admin password: ****
```

```
This process can restore factory default settings for the SN5428-2.
```

- * Select "apps" to remove active applications and retain system configuration settings.
- * Select "system" to remove active applications and system configuration settings.
- * Select "saved" to remove all backup configurations from disk.
- * Select "all" to remove active applications, system configuration, and saved configurations.

```
The system configuration includes the management port, dns, admin and monitor login, ntp, and snmp. You will need to use the console to reconfigure the management port if you erase the system configuration.
```

```
The system will reboot if you select "apps", "system", or "all".
```

```
Erase what? [apps/system/saved/all/cancel (cancel)]apps
```

```
Configuration cleared. System configuration settings retained. System halting.....!
```

```
System has been halted
```

Related Commands

Command	Description
setup access	Run the wizard to configure Monitor mode and Administrator mode passwords.
setup cluster	Change the configuration of the high availability environment.
setup fcip	Run the wizard to manually configure FCIP instances.
setup iscsi-port	Run the wizard to manually configure the port used for iSCSI traffic.
setup mgmt	Run the wizard to configure the management interface.
setup netmgmt	Run the wizard to configure network management.
setup scsi	Run the wizard to configure a SCSI routing instance.
setup time	Run the wizard to configure the system date and time.

clear conf {all | system}

To return certain configuration settings to factory defaults, use the **clear conf {all | system}** command.

clear conf {all | system} password

Syntax Description		
	all	Remove all storage router configuration information, including system configuration settings, saved configuration files, SCSI routing and FCIP instances, access lists, and cluster configuration settings.
	system	Remove all system configuration settings, SCSI routing instances, access lists and cluster configuration settings. Saved configuration files will be retained.
	<i>password</i>	The Administrator mode password.

Defaults None.

Command Modes Administrator.

Command History	Release	Modification
	2.2.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines

System configuration settings include:

- The management and HA interface IP addresses
- Configuration information for Fibre Channel interfaces
- Saved zone configuration information
- Domain name servers
- NTP server and time zone information
- SNMP information
- Administrator and Monitor passwords, and administrator contact information
- AAA authentication information
- VLAN and VTP information

Issuing the **clear conf** command with either the **system** or **all** keyword causes the storage router to reboot.

Deleting system configuration makes the storage router unavailable to Telnet or web-based GUI sessions until the management interface is reconfigured with an IP address via a console connection. Refer to the appropriate *Cisco Storage Router Software Configuration Guide* for your storage router model for more information about initial system configuration.

**Note**

The **clear conf** command will not reset any Secure Shell (SSH) public and private key pairs generated for the storage router. Use the **ssh keygen** command to generate new SSH keys after the storage router is restored to the selected factory default settings.

Examples

The following example removes all storage router configuration information, returning the storage router to its initial default configuration. The example uses the default Administrator mode password, *cisco*.

```
[SN5428-2_A1]# clear conf all cisco
```

```
Clearing configuration...
```

```
Current configuration and named configurations cleared.
System halting.....
```

Related Commands

Command	Description
clear conf	Run the wizard to reset the storage router to factory defaults.
setup access	Run the wizard to configure Monitor mode and Administrator mode passwords.
setup cluster	Change the configuration of the storage router's high availability environment.
setup fcip	Run the wizard to manually configure FCIP instances.
setup iscsi-port	Run the wizard to manually configure the port used for iSCSI traffic.
setup mgmt	Run the wizard to configure the management interface.
setup netmgmt	Run the wizard to configure network management.
setup scsi	Run the wizard to configure a SCSI routing instance.
setup time	Run the wizard to configure the system date and time.

clear counters fcip

To clear all counters associated with the specified FCIP instance, or all instances, use the **clear counters fcip** command.

clear counters fcip {*name* | **all**}

Syntax Description

<i>name</i>	The name of the FCIP instance for which counters will be cleared.
all	Clear counters for all FCIP instances.

Defaults

None.

Command Modes

Administrator.

Command History

Release	Modification
3.3.1	This command was introduced for the SN 5428-2.

Usage Guidelines

This command resets the specified operational statistics. It does not display the accumulated statistics before resetting the counters.

Clear counters before beginning a troubleshooting session, so you can quickly identify the counters that are changing.

Examples

The following example clears the operational counters for the FCIP instance named *fcip1*:

```
[SN5428-2A]# clear counters fcip fcip1
```

The following example clears the operational counters for all FCIP instances:

```
[SN5428-2A]# clear counters fcip all
```

Related Commands

Command	Description
fcip	Create an FCIP instance.
show fcip	Display configuration and operational information for the named FCIP instance.

clear counters interface

To clear all counters associated with the specified interface, or all interfaces, use the **clear counters interface** command.

clear counters interface {*if-name* | **all**}

Syntax Description	<i>if-name</i>	The name of the interface. Counters can be cleared for the management (mgmt), Fibre Channel (fc?), FC initiator interfaces (fci?), Gigabit Ethernet (ge?) interfaces, and the high availability (ha) interface (if available). When you type the clear counters interface ? command, the CLI lists the interfaces available. You cannot specify a nonexistent interface.
	all	Clear counters for all interfaces.

Defaults None.

Command Modes Administrator or Monitor.

Command History	Release	Modification
	2.2.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines This command resets all accumulated operational statistics for the specified interface. Operational statistics can include counters for packets received and transmitted, collisions, octets, multicast packets, dropped and unsupported protocol, exception status IOCBs (such as LIP reset aborts, port unavailable or logged out, DMA errors, port configuration changed, command timeout, data overrun, write or read data underrun, and queue full), Fibre Channel errors, and other general events.

Clear counters before beginning a troubleshooting session, so you can quickly identify the counters that are changing.

Examples The following example clears all accumulated operational statistics counters for the Fibre Channel interface *fc1*.

```
[SN5428-2A]# clear counters interface fc1
```

Related Commands	Command	Description
	show interface	Display operational and configuration information for the specified interface or all interfaces.

clear counters scsirouter

To reset accumulated operational statistics for the specified SCSI routing instance, use the **clear counters scsirouter** command.

```
clear counters scsirouter {name | all} {connection | host | target {name | all}}
```

Syntax Description

<i>name</i>	The name of the SCSI routing instance for which counters will be cleared.
all	Clear counters for all SCSI routing instances.
connection	Clear operational statistics related to connections only.
host	Clear operational statistics related to currently connected hosts only.
target <i>name</i>	Clear operational statistics related to the specified target.
target all	Clear operational statistics related to all targets.

Defaults

None.

Command Modes

Administrator or Monitor.

Command History

Release	Modification
2.2.1	This command was introduced for the SN 5428.
3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines

This command resets the specified operational statistics. It does not display the accumulated statistics before resetting the counters.

Clear counters before beginning a troubleshooting session, so you can quickly identify the counters that are changing.

Examples

The following example clears the connection counters for the SCSI routing instance *myScsi1*.

```
[SN5428-2A]# clear counters scsirouter myScsi1 connection
```

Related Commands

Command	Description
show scsirouter	Display configuration and operational information for the named SCSI routing instance.

clear fswitch

To clear the switch log files of all entries or to clear stored zoning configuration information, issue the **clear fswitch** command.

```
clear fswitch {devlog | syslog}
```

```
clear fswitch| zones {fabric | local}
```

Syntax Description		
devlog		The switch development log file.
syslog		The switch system log file.
zones		Zoning changes received from switches in the fabric and stored by the storage router.
fabric		Keyword used to clear the local zoning database and deactivate the active zone set for the entire fabric.
local		Keyword used to clear the local zoning database for the storage router only. All ports operating as E_Ports must be inactive before the local zoning configuration is cleared.

Defaults	
	None.

Command Modes	
	Administrator.

Command History	Release	Modification
	2.2.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines	
	Clear the switch development or system log file if it is large, or if you are going to perform testing and want to be sure the switch log files only reflects information from the testing session.

Clear local zoning configuration if you are moving the storage router from one FC switched zoned fabric to another or removing a switch from the fabric, or when other network changes have been made that render the saved zoning information inaccurate. All ports operating as E_Ports must be inactive. If the **clear fswitch zones local** command is issued when there is an active E_Port on the storage router, the command fails and issues a warning message indicating the FC interfaces that are currently enabled.

Use the **fabric** keyword to clear the local zoning database and deactivate the active zoneset for the entire fabric.

Examples

The following example clears the switch development log files:

```
[SN5428-2A]# clear fcswitch devlog
```

The following example clears the switch system log files:

```
[SN5428-2A]# clear fcswitch syslog
```

The following example clears all saved zoning information from the storage router local zoning database:

```
[SN5428-2A]# clear fcswitch zones local
```

The following example clears the local zoning database and deactivates the active zone set for the entire fabric:

```
[SN5428-2A]# clear fcswitch zones fabric
```

Related Commands

Command	Description
fcswitch devlog	Specify logging parameters for the switch development log file.
fcswitch domainid	Set the domain ID for the storage router, to be used for FC switched fabric zoning.
fcswitch syslog	Specify logging parameters for the switch system log file.
fcswitch zoning autosave	Configure the storage router to participate in FC switched fabric zones.
show debug fcswitch	Display internal FC interface parameters, including switch log entries.
show fcswitch	Display global configuration information for storage router FC interfaces.
show fcswitch fabric	Display information about the Fibre Channel fabric.
show fcswitch linkstate	Display information about the storage router link state database.
zone	Create a Fibre Channel fabric zone.
zoneset	Create a Fibre Channel fabric zone set.

clear log

To clear the storage router log file of all entries, issue the **clear log** command.

clear log

Syntax Description This command has no arguments or keywords.

Defaults None.

Command Modes Administrator.

Command History	Release	Modification
	2.2.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines Clear the storage router log file if it is large, or if you are going to perform testing and want to be sure the log file only reflects information from the testing session.

Examples The following example clears all entries from the storage router log file:

```
[SN5428-2A]# clear log
```

Related Commands	Command	Description
	logging level	Add rule entries to route storage router event, debug and trace messages to various destinations based on facility and notification level.
	show logging	Display the routing rules in the logging table and the contents of the storage router log file.

clear logging table

To clear the storage router logging table of all entries, or to reset the table to factory defaults, issue the **clear logging table** command.

clear logging table [to factory_defaults]

Syntax Description	to factory_defaults	Return the storage router logging table to the factory default logging rule entries.
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Defaults	None.
-----------------	-------

Command Modes	Administrator.
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Command History	Release	Modification
	2.3.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines	Use this command to remove all rules for routing storage router event messages. If the logging table is cleared, logging is still enabled but all messages will be discarded.
-------------------------	---

To return the logging table to the factory default logging rules, use the **to factory_defaults** keywords. The factory default logging rules are as follows:

- All messages from all facilities at notice level or lower levels are logged to all destinations.
- All messages from all facilities at info level or lower levels are logged to the storage router log file.

Examples	The following example clears all entries from the storage router logging table and returns the table to the default logging rules:
-----------------	--

```
[SN5428-2A]# clear logging table to factory_defaults
```

Related Commands	Command	Description
	delete logging	Delete a rule from the logging table.
	logging #?	Insert a routing rule entry into the storage router logging table.
	logging level	Add rule entries to route storage router event, debug and trace messages to various destinations based on facility and notification level.
	logging on	Enable or temporarily disable logging of storage router event message.
	show logging	Display the routing rules in the logging table and the contents of the storage router log file.

clear scsirouter failover

To clear the primary or secondary storage router from the HA failover list for the specified SCSI routing instance, use the **clear scsirouter** command.

```
clear scsirouter name failover {primary | secondary}
```

Syntax Description

<i>name</i>	The name of the SCSI routing instance.
primary	Delete the current primary storage router from the HA failover list.
secondary	Delete the secondary storage router from the HA failover list.

Defaults

None.

Command Modes

Administrator.

Command History

Release	Modification
2.2.1	This command was introduced for the SN 5428.
3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines

Use the **clear scsirouter failover** command to reset the primary or secondary storage router on the HA failover list for the specified SCSI routing instance. If there is no primary or secondary storage router configured on the HA failover list when the SCSI routing instance fails over, the cluster attempts to run the instance on the first node that is available based on HA failover eligibility information.

Use the **scsirouter failover** command to add a storage router to the HA failover list.



Note

This command causes the SCSI routing instance configuration information to be saved and all nodes in the cluster to be updated.

Examples

The following example removes the current primary storage router from the HA failover list for SCSI routing instance *foo*:

```
[SN5428-2A]# clear scsirouter foo failover primary
```

Related Commands	Command	Description
	failover scsirouter	Cause the named SCSI routing instance to cease running on the storage router.
	scsirouter failover	Add the storage router to the HA failover list for the specified SCSI routing instance.

clear scsirouter primary

To remove the storage router configured as the primary for the named SCSI routing instance, use the **clear scsirouter primary** command.

```
clear scsirouter name primary
```

Syntax Description	<i>name</i>	The name of the SCSI routing instance.
---------------------------	-------------	--

Defaults	None.
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Command Modes	Administrator.
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Command History	Release	Modification
	3.2.1	This command was introduced. For the SN 5428, this command replaces the scsirouter primary command with the none keyword.

Usage Guidelines

At any given time, a SCSI routing instance can run on only one storage router in a cluster. If a SCSI routing instance has the **primary** attribute set, the specified storage router will take over running that instance upon system restart or whenever target and critical resources are available.

If the **primary** attribute is not set, the SCSI routing instance continues running on the node where it was started until it is explicitly stopped (via a **no scsirouter enable** command), it automatically fails over to another storage router in the cluster because targets or critical resources are unavailable, or an explicit **failover scsirouter** command is issued. This is the default behavior.

Examples

The following command removes the storage router configured as the primary for the SCSI routing instance named lab2:

```
[SN5428-2A]# clear scsirouter lab2 primary
```

Related Commands	Command	Description
	clear scsirouter failover	Remove the designated primary or secondary storage router from the HA failover list for the specified SCSI routing instance.
	failover scsirouter	Identify the storage router as the preferred storage router to run the named SCSI routing instance.
	scsirouter failover	Add the storage router to the HA failover list for the specified SCSI routing instance.

clear static

To clear the mapping of the IP host to Fibre Channel (FC) address for the specified World Wide Port Name (WWPN), use the **clear static** command. This command is only available when the storage router is deployed for static transparent SCSI routing.

```
clear static iscsibindings {all | xxxxxxxxxxxxxxxx}
```

Syntax Description		
iscsibindings all		Clear all IP host to FC address mappings.
iscsibindings xxxxxxxxxxxxxx		Clear the mapping represented by this WWPN.
	Note	WWPN address notation is represented by 16 hex digits. The digits may be separated by colons. When using WWPN addresses in this command, colons can be omitted or placed anywhere in the address notation as long as they do not leave one character without a partner character.

Defaults None.

Command Modes Administrator.

Command History	Release	Modification
	3.3.1	This command was introduced.

Usage Guidelines When the storage router is deployed for static transparent SCSI routing, the IP host to FC address mappings are saved and retained in the storage router when it is restarted. If an IP host will no longer be accessing storage, or if you want the storage router to create a new mapping when the IP host logs in again, you can clear an existing mapping. Mappings can only be cleared if they are not currently in use.

To display the mappings that are currently configured in the storage router, use the **show static iscsibindings** command.

Examples The following example displays the currently configured mappings, and then deletes the mapping for the IP host at IP address 10.1.20.2 (WWPN 280100065338d6c0):

```
[SN5428-2A]# show static iscsibindings
Interface WWPN                Host IP Address  Host Name
-----
fci1      280100065338d6c0 10.1.20.2      iscsi.cisco.testlab
fci1      280200065338d6c0 10.1.4.213     iqn.1987-05.com.cisco.02.0AB08....B6E5CCE.WIN1
fci2      290100065338d6c0 10.1.30.100    iqn.1987-05.com.cisco.02.9FD389....36D3D3.NT10

[SN5428-2A]# clear static iscsibindings 280100065338d6c0
Binding cleared for WWPN 280100065338d6c0
```

The following example clears all IP host to FC mappings saved in the storage router. If a mapping is in use by an IP host, the mapping will not be cleared.

```
[SN5428-2A]# clear static iscsibindings all
```

Related Commands	Command	Description
	show static	Display the currently configured IP host to FC address mappings saved in the storage router.
	static iscsibinding interface autolearn	Enable and disable auto-learning of static WWPN bindings.
	static iscsibinding interface index	Manually populate the iSCSI static binding table for the specified interface.

clock set

To set the storage router system clock to the given date and time, use the **clock set** command. Date and time information is used for log files and the user interface.

clock set *hh:mm:ss mm dd yyyy*

Syntax Description

hh:mm:ss mm dd yyyy The current time in hours, minutes, and seconds, followed by the current month, day, and year. For example, 13:55:22 06 22 2001.

Defaults

None.

Command Modes

Administrator.

Command History

Release	Modification
2.2.1	This command was introduced for the SN 5428.
3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines

If the storage router should synchronize its date and time with a network time protocol (NTP) server, see the **ntp peer** command.

After a time change, a system reboot is required to synchronize the system timestamp with the timestamps on the integrated FC switch log files, syslog and devlog.

Examples

The following example sets the storage router date and time to June 22, 2001 at 14:39:00.

```
[SN5428-2A]# clock set 14:39:00 06 22 2001
```

Related Commands

Command	Description
clock timezone	Specify the time zone for the storage router.
ntp peer	Specify the name or IP address of the NTP server with which the storage router will synchronize date and time.
setup time	Run the wizard to configure the system date and time.
show clock	Display the current system date and time, including the system timezone.

clock timezone

To specify the time zone for the storage router, use the **clock timezone** command.

clock timezone {*string* | ?}

Syntax Description		
<i>string</i>		A character string representing the time zone of the storage router. For example, <i>America/Chicago</i> or <i>Europe/Amsterdam</i> .
?		Display a list of all valid time zones. Use any time zone in this list for the <i>string</i> parameter to set the storage router to that time zone.

Defaults None.

Command Modes Administrator.

Command History	Release	Modification
	2.2.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines Unless you specify the time zone, the clock setting is assumed to be in Universal time, also known as Greenwich Mean Time (GMT).

You can use the **setup time** wizard to select a time zone, set the clock and date, and identify an NTP server for the storage router.

To use the **clock timezone** command, you must know the appropriate time zone string. Use the “?” to display a list of valid time zone strings.

After a time change, a system reboot is required to synchronize the system timestamp with the timestamps on the integrated FC switch log files, syslog and devlog.

Examples The following example sets the storage router time zone to US/Mountain:

```
[SN5428-2A]# clock timezone US/Mountain
```

Related Commands	Command	Description
	clock set	Set the storage router system clock.
	ntp peer	Specify the name or IP address of the NTP server with which the storage router will synchronize date and time.
	setup time	Run the wizard to configure the system date and time.
	show clock	Display the current system date and time, including the system time zone.

copy

To copy the named configuration file or script file from the specified location to the *savedconfig* or *script* directory, or from the storage router to the specified location, use the **copy** command. The exchange is via HTTP or TFTP. When copying files to the storage router, any file of the same name in the *savedconfig* or *script* directory is overwritten.

```
copy http://FileUrl {savedconfig:configfilename | script:scriptfilename}
```

```
copy tftp://Location/Directory/Filename {savedconfig:configfilename | script:scriptfilename}
```

```
copy {savedconfig:configfilename | script:scriptfilename} tftp://Location/Directory/Filename
```

Syntax Description		
<i>FileUrl</i>		The URL (including the file name) of the configuration or script file to be copied to the storage router, such as <i>http://acme/~myhome/allconf.xml</i> . (In this example, the host name <i>acme</i> can be used if the ip name-server command was previously issued.) Configuration files are transferred to the <i>savedconfig</i> directory; script files are transferred to the <i>script</i> directory.
<i>configfilename</i>		The name of the saved configuration file. If the file is being copied from the storage router to a TFTP server, it must exist in the storage router <i>savedconfig</i> directory.
<i>scriptfilename</i>		The name of the saved script file. If the file is being copied from the storage router to a TFTP server, it must exist in the storage router <i>script</i> directory.
<i>Location/Directory/File name</i>		The name of the TFTP server and default directory, followed by the file name. The file must currently exist in the directory. It will be overwritten by the file copied from the storage router. Note If the default directory is <i>tftpboot</i> , specify only the name of the TFTP server and the file name.

Defaults None.

Command Modes Administrator.

Command History	Release	Modification
	2.2.1	This command was introduced for the SN 5428.
	3.2.1	This command was introduced for the SN 5428-2.

Usage Guidelines The **copy** command does not affect the running or persistent configuration of the storage router or high availability cluster. However, the **restore** command can be used to copy the contents of a saved configuration file into persistent memory, while the **read script** command can be used to execute the commands in a script file to modify a storage router configuration.

Because TFTP does not require a user name and password, directories and files cannot be created. When you copy a file to a TFTP server, you must have read/write permissions for the complete file path, and the file copied from the storage router must already exist.

Examples

The following example copies the saved configuration file *myFoo.xml* from a server with an IP address of 10.1.40.10 to the storage router. The file name is changed to *myFoo_restore.xml* when it is written to the storage router *savedconfig* directory.

```
[SN5428-2A]# copy http://10.1.40.10/usr/SN5428-2/savedconfig/myFoo.xml
savedconfig:myFoo_restore.xml
```

The following example copies the script file *SN5428-2_Lab* from a server named *acme*. The file name is unchanged when it is written to the storage router *script* directory.

```
[SN5428-2A]# copy http://acme/~myhome/SN5428-2_Lab script:SN5428-2_Lab
```

The following example copies the saved configuration file, *backup_23*, to the *daily_backup* file in the *tftpboot* directory of the *tftp_primary* server. The file, *daily_backup*, must already exist in the *tftpboot* directory of the *tftp_primary* server. This command will overwrite the existing *daily_backup* file.

**Note**

Because the default directory is *tftpboot*, the command does not specify directory information.

```
[SN5428-2A]# copy savedconfig:backup_23 tftp://tftp_primary/daily_backup
```

Related Commands	Commands	Description
	read script	Read and execute the CLI commands in the named script file.
	restore aaa	Restore AAA authentication services from the named configuration file.
	restore accesslist	Restore the named access list or all access lists from the named configuration file.
	restore all	Restore the contents of the named configuration file into memory.
	restore fcip	Restore the named FCIP instance from the named configuration file.
	restore fcswitch	Restore Fibre Channel configuration information from the named configuration file.
	restore scsirouter	Restore the named SCSI routing instance from the named configuration file.
	restore system	Restore selected system information from the named configuration file.
	restore vlan	Restore VLAN configuration information from the named configuration file.
	save aaa	Save the current AAA configuration information.
	save accesslist	Save configuration data for the named access list or all access lists.
	save all	Save all configuration information.
	save fcip	Save configuration information for the named FCIP instance.
	save fcswitch	Save all Fibre Channel configuration, including global configuration settings and zoning information.
	save scsirouter	Save configuration information for the named SCSI routing instance.
	save system	Save selected system configuration information.
	save vlan	Save configuration information for the named VLAN or for all VLANs.
	show savedconfig	Display the contents of the <i>savedconfig</i> directory or the contents of the named configuration file.
	show script	Display the contents of the <i>script</i> directory or the contents of the named command file.