Cisco Service Control Engine (SCE)
CLI Command Reference

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Cisco Service Control Engine (SCE) CLI Command Reference

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Index 1

Preface

This guide contains Command-Line Interface (CLI) commands to maintain the SCE Platform. This guide assumes a basic familiarity with telecommunications equipment and installation procedures.

Throughout the book, the procedures shown are examples of how to perform typical SCE platform management functions. Because of the large number of functions available, not every possible procedure is documented in the instructional chapters. The *CLI Command Reference* (on page 2-1) provides a complete listing of all possible commands. The other chapters provide examples of how to implement the most common of these commands, general information on the interrelationships between the commands and the conceptual background of how to use them.

Audience

This guide is for the networking or computer technician responsible for configuring and maintaining the SCE Platform on-site. It is also intended for the operator who manages the SCE Platform(s). This manual does not cover high-level technical support procedures available to Root administrators and Cisco technical support personnel.

Organization

This manual covers the following topics:

Chapter	Title	Description
Chapter 1	*Command-Line Interface* (on page 1-1)	Describes how to use the SCE Platform Command-Line Interface (CLI), its hierarchical structure, authorization levels and its help features.
Chapter 2	*CLI Command Reference* (on page 2-1)	Provides an alphabetical list of the available CLI commands that you can use to configure the ***SCE***.

Related Publications

This *Cisco Service Control Engine (SCE) CLI Command Reference* should be used in conjunction with the following Service Control Engine documentation:

- *Cisco Service Control Engine (SCE) Software Configuration Guide*
- *Cisco SCE 2000 4xGBE Installation and Configuration Guide*
- *Cisco SCE 2000 4/8xFE Installation and Configuration Guide*
- *Cisco SCE 1000 2xGBE Installation and Configuration Guide*

Document Conventions

Command descriptions use the following conventions:

boldface font	Commands and keywords are in **boldface**.
italic font	Arguments for which you supply values are in i*talics*.
[ ]	Elements in square brackets are optional.
{x | y | z}	Alternative keywords are grouped in braces and separated by vertical bars.
[x | y | z]	Optional alternative keywords are grouped in brackets and separated by vertical bars.
string	A nonquoted set of characters. Do not use quotation marks around the string, or the string will include the quotation marks.

Screen examples use the following conventions:

`screen` font	Terminal sessions and information the system displays are in `screen` font.
`boldface screen` font	Information you must enter is in **`boldface screen`** font.
`italic screen` font	Arguments for which you supply values are in *`italic screen`* font.
^	The symbol ^ represents the key labeled **Control**—for example, the key combination ^**D** in a screen display means hold down the **Control** key while you press the **D** key.
< >	Nonprinting characters, such as passwords, are in angle brackets.
[ ]	Default responses to system prompts are in square brackets.
!, #	An exclamation point (**!**) or a pound sign (**#**) at the beginning of a line of code indicates a comment line.

Notes, cautionary statements, and safety warnings use these conventions.

Note Means *reader take note*. Notes contain helpful suggestions or references to materials not contained in this manual.

Warning Means *reader be careful*. You are capable of doing something that might result in equipment damage or loss of data.

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Cisco Technical Support Website

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Accessing all the tools on the Cisco TAC website requires a Cisco.com user ID and password. If you have a valid service contract but do not have a login ID or password, register at this *URL* (http://tools.cisco.com/RPF/register/register.do).

Submitting a Service Request

Using the online *TAC Service Request Tool* (http://www.cisco.com/techsupport/servicerequest) is the fastest way to open S3 and S4 service requests. (S3 and S4 service requests are those in which your network is minimally impaired or for which you require product information.) After you describe your situation, the TAC Service Request Tool automatically provides recommended solutions. If your issue is not resolved using the recommended resources, your service request will be assigned to a Cisco TAC engineer.

For S1 or S2 service requests or if you do not have Internet access, contact the Cisco TAC by telephone. (S1 or S2 service requests are those in which your production network is down or severely degraded.) Cisco TAC engineers are assigned immediately to S1 and S2 service requests to help keep your business operations running smoothly.

To open a service request by telephone, use one of the following numbers:

Asia-Pacific: +61 2 8446 7411 (Australia: 1 800 805 227)

EMEA: +32 2 704 55 55

USA: 1 800 553-2447

A complete listing of *Cisco TAC contacts* (http://www.cisco.com/techsupport/contacts) is available online.

Definitions of Service Requests Severity

To ensure that all service requests are reported in a standard format, Cisco has established severity definitions.

Severity 1 (S1)—Your network is “down,” or there is a critical impact to your business operations. You and Cisco will commit all necessary resources around the clock to resolve the situation.

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Severity 3 (S3)—Operational performance of your network is impaired, but most business operations remain functional. You and Cisco will commit resources during normal business hours to restore service to satisfactory levels.

Severity 4 (S4)—You require information or assistance with Cisco product capabilities, installation, or configuration. There is little or no effect on your business operations.

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- *Packet* (http://www.cisco.com/packet) magazine is the Cisco Systems technical user magazine for maximizing Internet and networking investments. Each quarter, Packet delivers coverage of the latest industry trends, technology breakthroughs, and Cisco products and solutions, as well as network deployment and troubleshooting tips, configuration examples, customer case studies, certification and training information, and links to scores of in-depth online resources.
- *iQ Magazine* (http://www.cisco.com/go/iqmagazine) is the quarterly publication from Cisco Systems designed to help growing companies learn how they can use technology to increase revenue, streamline their business, and expand services. The publication identifies the challenges facing these companies and the technologies to help solve them, using real-world case studies and business strategies to help readers make sound technology investment decisions.
- *Internet Protocol Journal* (http://www.cisco.com/ipj) is a quarterly journal published by Cisco Systems for engineering professionals involved in designing, developing, and operating public and private internets and intranets.
- World-class networking training is available from Cisco. You can view current offerings at this *URL* (http://www.cisco.com/en/US/learning/index.html).

CHAPTER 1

Command-Line Interface

This chapter describes how to use the SCE Platform Command-Line Interface (CLI), its hierarchical structure, authorization levels and its help features. The Command-Line Interface is one of the ***SCE*** Platform management interfaces.

This chapter contains the following sections:

- Getting Help 1-1
- Authorization and Command Levels (Hierarchy) 1-2
- CLI Help Features 1-12
- Navigational and Shortcut Features 1-14
- Managing Command Output 1-16
- CLI Scripts1-18

The CLI is accessed through a Telnet session or directly via the console port on the front panel of the SCE Platform. When you enter a Telnet session, you enter as the simplest level of user, in the User Exec mode.

The SCE Platform supports up to six concurrent CLI sessions; five sessions initiated by Telnet connection, and one session on the console port.

In this chapter, the procedures shown are examples of how to perform typical SCE Platform management functions using the CLI. The *CLI Command Reference* chapter gives you examples of how to implement the most common of these commands, and general information on the interrelationships between the commands and the conceptual background of how to use them.

Getting Help

To obtain a list of commands that are available for each command mode, enter a question mark (?) at the system prompt. You also can obtain a list of any command's associated keywords and arguments with the context-sensitive help feature.

The following table lists commands you can enter to get help that is specific to a command mode, a command, a keyword, or an argument.

Table 1-1 Getting Help

Command	Purpose
abbreviated-command-entry?	Obtain a list of commands that begin with a particular character string. (Do not leave a space between the command and question mark.)
abbreviated-command-entry<Tab>	Complete a partial command name.
?	List all commands available for a particular command mode.
command ?	List a command's associated keywords. Leave a space between the command and question mark.
command keyword ?	List a keyword's associated arguments. Leave a space between the keyword and question mark.

Authorization and Command Levels (Hierarchy)

When using the CLI there are two important concepts that you must understand in order to navigate:

- **Authorization Level:** Indicates the level of commands you can execute. A user with a simple authorization level can only view some information in the system, while a higher level administrator can actually make changes to configuration. Almost all of the procedures in this manual require an Admin authorization level. See CLI Command Hierarchy.
- **Command Hierarchy Level:** Provides you with a context for initiating commands. Commands are broken down into categories and you can only execute each command within the context of its category. For example, in order to configure parameters related to the Line Card, you need to be within the LineCard Interface Configuration Mode. See CLI Command Hierarchy.

The following sections describe the available Authorization and Command Hierarchy Levels and how to maneuver within them.

The on-screen prompt indicates both your authorization level and your command hierarchy level, as well as the assigned host name. See *Prompt Indications* (on page 1-12).

Note Throughout the manual, ***SCE*** is used as the sample host name.

CLI Command Hierarchy

The set of all CLI commands is grouped in hierarchical order, according to the type of the commands. The first two levels in the hierarchy are the User Exec and the Privileged Exec modes. These are non-configuration modes in which the set of available commands enables the monitoring of the SCE Platform, file system operations, and other operations that cannot alter the configuration of the SCE Platform.

The next levels in the hierarchy are the Global and Interface configuration modes, which hold a set of commands that control the global configuration of the SCE Platform and its interfaces. Any of the parameters set by the commands in these modes should be saved in the startup configuration, such that in the case of a reboot, the SCE Platform restores the saved configuration.

The following table shows the available CLI modes.

Table 1-2 CLI Modes

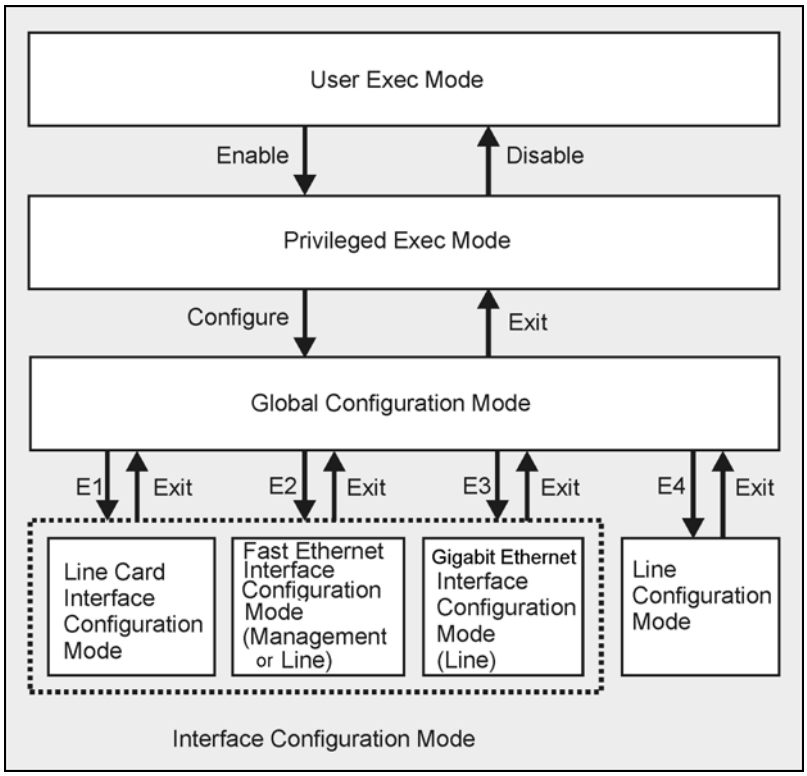
Mode	Description	Level	Prompt indication
User Exec	Initial mode with very limited functionality.	User	***SCE***>
Privileged Exec	General administration; file system manipulations and control of basic parameters that do not change the configuration of the SCE Platform.	Admin	***SCE#***
Global Configuration	Configuration of general system parameters, such as DNS, host name, and time zone.	Admin	***SCE***`(config)#`
Interface Configuration	Configuration of specific system interface parameters, such as the Line Card and the Ethernet interfaces.	Admin	***SCE***`(config if)#`
Line Configuration	Configuration of Telnet lines, such as an access-list.	Admin	***SCE***`(config-line)#`

When you login to the system, you have the User authorization level and enter User Exec mode. Changing the authorization level to Admin automatically moves you to Privileged Exec mode. In order to move to any of the configuration modes, you must enter commands specific to that mode.

The list of available commands in each mode can be viewed using the question mark ‘?’ at the end of the prompt.

The figure below, illustrates the hierarchical structure of the CLI modes, and the CLI commands used to enter and exit a mode.

Figure 1-1: CLI Command Hierarchy



The following commands are used to enter the different configure interface modes and the Line Configuration Mode:

- E1 **`interface LineCard 0`**
- E2 **`interface FastEthernet 0/0`** (management port, all platforms)
- E2 **`interface FastEthernet`** *`0/1, 0/2, 0/3, or 0/4`* (line ports, SCE 2000 4/8xFE platform)
- E3 **`interface GigabitEthernet`** *`0/1, 0/2, 0/3, or 0/4`* (line ports, SCE 2000 4xGBE platform)
- E3 **`interface GigabitEthernet`** *`0/1, 0/,`* (line ports, SCE 1000 2xGBE platform)
- E4 **`line vty 0`**

To move from one interface configuration mode to another you must exit the current interface configuration mode (as illustrated in the above figure).

Note Although the system supports up to five concurrent Telnet connections, you cannot configure them separately. This means that any number you enter in the **`line vty`** command (**0**, **1**, **2**, **3** or **4**) will act as a **0** and configure all five connections together.

EXAMPLE:

This example illustrates moving into and out from Interface configuration mode as follows:

- Configure the SCE Platform time zone (global configuration)
- Enter **`FastEthernet`** Interface configuration mode for Mng port
- Configure the speed of the management interface
- Define the link mode.
- Exit Interface configuration mode

```
SCE#>configure
SCE(config)#>clock timezone PST -10
SCE(config)#>interface FastEthernet 0/0
SCE(config if)#>speed 100
SCE(config)#>exit
SCE(config)#>interface LineCard 0
SCE(config if)#>link-mode forwarding
SCE(config if)#>exit
```

Entering and Exiting Global Configuration Mode

To enter the Global Configuration Mode:

Step 1 At the ***SCE***# prompt, type **`configure`**, and press **Enter**.

The ***SCE***(config)# prompt appears.

To exit the Global Configuration Mode:

Step 1 At the ***SCE***(config)# prompt, type exit and press **Enter**.

The ***SCE***# prompt appears.

Interface Configuration Modes

The components that are configured by the Interface Configuration Modes are:

- Card
  - LineCard: **`Interface LineCard 0`**

    The LineCard interface configures the main functionality of viewing and handling traffic on the line.
- Ports
  - See *Configuring the Physical Ports* (on page 1-6)
- Telnet
  - Line Configuration Mode: **`Line vty 0`**

    The Line Configuration Mode enables you to configure Telnet parameters.

Configuring the Physical Ports

The SCE Platform system contains the following physical port interfaces:

- Fast Ethernet Management:

  `Interface FastEthernet 0/0`

  The FastEthernet Management Interface configures the settings for the interface to other network elements within the system. This interface should be connected to the internal Ethernet within the operator's site.
- Fast Ethernet (SCE 2000 4/8xFE):

  `Interface FastEthernet 0/1, 0/2, 0/3, or 0/4`

  The FastEthernet Interface mode configures the settings for the FastEthernet interface to the Internet traffic on the wire. Each of the four ports can be set individually.
- Gigabit Ethernet (SCE 1000 platform):

  `Interface GigabitEthernet 0/1,` `or` **`0/2`**

  The GigabitEthernet Interface mode configures the settings for the GigabitEthernet interface to the Internet traffic on the wire. Each of the two ports can be set individually.
- Gigabit Ethernet (SCE 2000 4xGBE platform):

  `Interface GigabitEthernet 0/1, 0/2, 0/3, or 0/4`

  The GigabitEthernet Interface mode configures the settings for the GigabitEthernet interface to the Internet traffic on the wire. Each of the four ports can be set individually.

Note You need to specify the slot number and the interface number when referencing any interface. The slot number is always 0, and the interfaces are numbered as follows:
Ethernet Line Interfaces:
SCE 1000 platform: **1,2**
SCE 2000 platform: **1,2,3,4**
FastEthernet Management Interface: **0**

Configuring the Management Port

The following commands are used to configure the management port for all platforms:

- *duplex* ("speed" on page 2-245)
- *ip address* (on page 2-65)
- *speed* (on page 2-245)

Configuring the Fast Ethernet Line Ports

The commands that are used to configure the Fast Ethernet line ports are:

- *bandwidth* ("speed" on page 2-245)
- *duplex* (on page 2-50)
- *queue* ("speed" on page 2-245)
- *speed* (on page 2-245)

Configuring the Gigabit Ethernet Line Ports

The commands that are used to configure the Gigabit Ethernet line ports are:

- *auto-negotiate (GigabitEthernet only)* (on page 2-15)
- *bandwidth* ("queue" on page 2-122)
- *queue* (on page 2-122)

Entering FastEthernet (Management) Interface Configuration Mode

Before you can configure the FastEthernet parameters for the management interface, you must be in the FastEthernet Management Interface Configuration Mode.

To enter FastEthernet Management Interface Configuration Mode:

Step 1 To enter Global Configuration Mode, type **`configure`** and press **Enter**.

The ***SCE***`(config)#` prompt appears.

Step 2 Type **`interface FastEthernet 0/0`** and press **Enter**.

The ***SCE***`(config if)#` prompt appears.

The system prompt changes to reflect the higher level mode.

To return to the Global Configuration mode:

Step 1 Type **`exit`**.

Entering LineCard Interface Configuration Mode

The following procedure is for entering Line Card Interface Configuration mode. The procedures for entering the other interfaces are the same except for the interface command as described above and in *CLI Command Reference* (on page 2-1).

To enter LineCard Interface Configuration mode:

Step 1 To enter Global Configuration Mode, at the ***SCE***# prompt, type **`configure`**, and press **Enter**.

The ***SCE***`(config)#` prompt appears.

Step 2 Type **`interface LineCard`** 0, and press **Enter**.

The ***SCE***`(config if)#` prompt appears.

Step 3 To return to Global Configuration Mode, type **`exit`** and press **Enter**.

The ***SCE***`(config)#` prompt appears.

Step 4 To exit Global Configuration Mode, type **`exit`** and press **Enter**.

The ***SCE***# prompt appears.

Entering Ethernet Line Interface Configuration Mode

Entering the Fast Ethernet Line Interface Configuration Mode

To enter the FastEthernet Interface Configuration Mode:

Step 1 To enter Global Configuration Mode, type **`configure`** and press **Enter**.

The ***SCE***`(config)#` prompt appears.

Step 2 For the SCE 2000, type **`interface FastEthernet [0/1|0/2|0/3|0/4]`** and press **Enter**.

The ***SCE***`(config if)#` prompt appears.

EXAMPLE:

The following example shows how to enter Configuration Mode for the FastEthernet Interface number 3.

```
SCE(config)#interface FastEthernet 0/3
SCE(config if)#
```

Entering the Gigabit Ethernet Line Interface Configuration Mode

To enter the GigabitEthernet Interface Configuration Mode:

Step 1 To enter Global Configuration Mode, type **`configure`** and press **Enter**.

The ***SCE***`(config)#` prompt appears.

Step 2 For the SCE 1000, type **`interface GigabitEthernet [0/1|0/2]`** and press **Enter**.

Step 3 For the SCE 2000, type **`interface GigabitEthernet [0/1|0/2|0/3|0/4]`** and press **Enter**.

The ***SCE***`(config if)#` prompt appears.

EXAMPLE:

The following example shows how to enter Configuration Mode for the GigabitEthernet Interface number 2.

```
SCE(config)#interface GigabitEthernet 0/2
SCE(config if)#
```

Navigating between the Interface Configuration Modes

To navigate from one Interface Configuration Mode to another:

Step 1 Type **`exit`**.

You are returned to the Global Configuration Mode.

Step 2 Type the appropriate command to enter a different Interface Configuration Mode.

Exiting Modes

This section describes how to revert to a previous mode. When you use the exit command you revert to the general level above the current level, as shown in the figure in *CLI Command Hierarchy* (on page 1-2).

To exit from the Privileged Exec mode and revert to the User Exec mode:

Step 1 At the ***SCE#*** prompt, type **`disable`**, and press **Enter**.

The ***SCE>*** prompt for the User Exec mode appears.

Exiting from any configuration mode and revert to the previous mode is done in the same manner, as in the following procedure.

To exit from the Global Configuration Mode:

Step 1 At the ***SCE***`(config)#` prompt, type **`exit`**, and press **Enter**.

The appropriate prompt for the previous level appears.

EXAMPLE:

The following example shows the system response when you exit the Interface Configuration mode.

```
SCE(config if)#exit

SCE(config)#
```

CLI Authorization Levels

The SCE Platform system has three authorization levels, which represent the user's access permissions. When you initially connect to the SCE Platform, you automatically have the most basic authorization level, that is User, which allows minimum functionality.

In order to perform administrative functions on the SCE Platform, you must have Admin or Root authorization, which means changing the level by logging in with an Admin or Root password, as described in the procedure "To log in with Admin level authorization," below. This manual covers the functions that can be performed by the Admin level user.

The commands available in each authorization level are all the commands of the lower authorization layers plus commands that are authorized only to this level.

Note This manual covers the functions that can be performed by the Admin level user, unless otherwise noted.

The following CLI commands are related to authorization levels:

- `enable`
- `disable`

Each authorization level has a value (number) corresponding to it. When using the CLI commands, use the values, not the name of the level, as shown in the following table.

Table 1-3 Authorization Levels

Level	Description	Value	Prompt
User	Password required. This level enables basic operational functionality.	0	>
Admin	Password required. For use by general administrators, the Admin authorization level enables configuration and management of the SCE Platform.	10	#
Root	Password required. For use by technical field engineers, the Root authorization level enables configuration of all advanced settings, such as debug and disaster recovery. The Root level is used by technical engineers only and is not documented in this manual.	15	#>

A telnet session begins with a request for password, and will not continue until the proper user password is supplied. This enhances the security of the system by not revealing its identity to unauthorized people.

To log in with Admin level authorization:

Step 1 Initiate a telnet connection.

Step 2 A `Password:` prompt appears. Type in the user level password and press **Enter**.

The ***SCE***> prompt appears.

You now have user level authorization.

Step 3 From the ***SCE***> prompt, type **`enable 10`** and press **Enter**.

The system prompts for a password by showing the prompt `Password`:

Step 4 Type in the password for the Admin level and press **Enter**.

Note that the password is an access-level authorization setting, not an individual user password.

The system prompt changes to ***SCE***# to show you are now in Admin level.

EXAMPLE:

The following example illustrates how to change the authorization level from User to Admin, and then revert back to User. No password is required for moving to a lower authorization level.

```
SCE>enable 10
Password:  cisco
SCE#disable
SCE>
```

Prompt Indications

The on-screen prompt indicates your authorization level, your command hierarchy level, and the assigned host name. The structure of the prompt is:
`<hostname(mode-indication)level-indication>`

Authorization levels are indicated as follows:

This prompt...	Indicates this...
>	indicates User and Viewer levels
#	indicates Admin level
#>	indicates Root level

Command hierarchy levels are indicated as follows:

This command hierarchy...	Is indicated as...
User Exec	***SCE***>
Privileged Exec	***SCE***#
Global Configuration	***SCE***(config)#
Interface Configuration	***SCE***(config if)#
Line Configuration	***SCE***(config-line)#

EXAMPLE:

The prompt My***SCE***(config if)# indicates:

- The name of the ***SCE*** platform is My***SCE***
- The current CLI mode is Interface configuration mode
- The user has Admin authorization level

CLI Help Features

CLI provides context sensitive help. Two types of context sensitive help are supported:

- Partial help
- Argument help

Partial Help

To obtain a list of commands that begin with a particular character string, enter the abbreviated command entry immediately followed by a question mark (?). This form of help is called partial help, because it lists only the keywords or arguments that begin with the abbreviation you entered.

EXAMPLE:

The following example illustrates how typing **c?** displays all available arguments that start with the letter c.

```
SCE(config)#snmp-server c?
Community          contact

SCE(config)#snmp-server c
```

Argument Help

To obtain a list of command's associated keywords or parameters, type a question mark (?) in place of a keyword or parameter on the command line.

Note that if <**Enter**> is acceptable input, the symbol <cr> represents the **Enter** key.

EXAMPLE:

The following example illustrates how to get a list of all arguments or keywords expected after the command **snmp-server**.

SCE(config)#**snmp-server ?**

Community	Define community string
Contact	Set system contact
Enable	Enable the SNMP agent
Host	Set traps destination
Location	Set system location

SCE(config)#

When asking for help on particular parameter, the system informs you of the type of data that is an accepted legal value. The types of parameters supported are:

STRING	When a String is expected, you can enter any set of characters or digits. If the string has a space as one of its characters, use double-quote (") marks to enclose the string.
DECIMAL	Any decimal number. Positive number is assumed, for negative numbers use the "–" symbol.
HEX	A hexadecimal number; must start with either 0x or 0X.

EXAMPLE:

The following example illustrates the use of **?** to get help on commands syntax. In this example, you can enter either the word **running-config**, or any name of a file, after the word **copy**.

***SCE*#copy ?**

running-config Copy running configuration file

STRING Source file name

***SCE*#**

The [no] Prefix

Many CLI commands offer the option of adding the word **no** before the command to disable the feature controlled by the command or revert it to its default configuration. This notation is shown in the *CLI Command Reference* (on page 2-1) as **[no]** to denote it is optional.

For example, **no service telnetd** disables the telnet server. Enabling the telnet server is done by typing **service telnetd**.

Navigational and Shortcut Features

Command History

CLI maintains a history buffer of the most recent commands you used in the current CLI session for quick retrieval. Using the keyboard, you can navigate through your last commands, one by one, or all commands that start with a given prefix. By default, the system saves the last 30 commands you typed. You can change the number of commands remembered using the **history size** command.

To use the history functions, use the keys shown in the following table.

Table 1-4 Keyboard Shortcuts for History Functions

Arrow	Shortcut	Description
Up arrow	Ctrl-P	Moves cursor to the previous command with the same prefix.
Down arrow	Ctrl-N	Moves cursor to the next command with the same prefix as original.
	Ctrl-L Ctrl-R	Re-display the current command line.

Keyboard Shortcuts

The SCE Platform has a number of keyboard shortcuts that make it easier to navigate and use the system. The following table shows the keyboard shortcuts available.

You can get a display the keyboard shortcuts at any time by typing **`help bindings`**.

Table 1-5 Keyboard Shortcuts

Description	Shortcut Key
Navigational shortcuts	
Move cursor one character to the right.	CTRL-F /->
Move cursor one character to the left.	CTRL-B /<-
Move cursor one word to the right (forward).	ESC-F
Move cursor one word to the left (backward.	ESC-B
Move cursor to the start of the line.	CTRL-A
Move cursor to the end of the line.	CTRL-E
Editing shortcuts	
Delete the character where the cursor is located.	CTRL-D
Delete from the cursor position to the end of the word.	ESC-d
Delete the character before the current location of the cursor.	Backspace
Delete the character before the current location of the cursor.	CTRL-H
Deletes from the cursor position to the end of the line	CTRL-K
Deletes all characters from the cursor to the beginning of the line	CTRL-U
Deletes all characters from the cursor to the beginning of the line. (Same functionality as CTRL-U.)	CTRL-X
Delete the word to the left of the cursor.	CTRL-W
Recall the last item deleted.	CTRL-Y
Completes the word when there is only one possible completion.	<Tab>
Completes the word when there is only one possible completion. (Same functionality as <Tab>.)	CTRL-I

Tab Completion

The CLI interface features tab completion. When you type in the first letters of a command and type **<Tab>**, the system automatically fills in the rest of the command or keyword. This feature works only when there is one possible command that could be possible using the starting letters.

EXAMPLE:

The letters **`snm`** followed by **<Tab>** will be completed to the command **`snmp-server.`**

```
SCE(config)#snm<Tab>

SCE(config)#snmp-server
```

If you type **<Enter>** instead of **<Tab>**, and there is no ambiguity, the system actually carries out the command which would be filled in by the rest of the word.

EXAMPLE:

The following example displays how the system completes a partial (unique) command for the **enable** command. Because **enable** does not require any parameters, the system simply carries out the **enable** command when the user presses **Enter**.

```
SCE>en<Enter>

Password:

SCE#
```

FTP User Name and Password

CLI enables saving ftp user name and password to be used in FTP operations—download and upload, per session.

These settings are effective during the current CLI session.

EXAMPLE:

The following example illustrates how to set FTP password and user name and the use in these settings for getting a file named *config.tmp* from a remote station using FTP protocol.

```
SCE#ip ftp password vk

SCE#ip ftp username vk

SCE#copy ftp://@10.1.1.253/h:/config.tmp myconf.txt

connecting 10.1.1.253 (user name vk password vk) to retrieve config.tmp

SCE#
```

Managing Command Output

Some commands, such as many **show** commands, may have many lines of output. There are several ways of managing the command output:

- Scrolling options: When the command output is too large to be displayed all at once, you can control whether the display scrolls line by line or refreshes the entire screen.
- Filtering options: You can filter the output so that output lines are displayed only if they include or exclude a specified expression.
- Redirecting to a file: You can send the output to a specified file

Scrolling the Screen Display

The output of some **show** and **dir** commands is quite lengthy and cannot all be displayed on the screen at one time. Commands with many lines of output are displayed in chunks of 24 lines. You can choose to scroll the display line by line or refresh the entire screen. At the prompt after any line, you can type one of the following keys for the desired action:

- **<Enter>**– show one more line
- **<Space>** – show 24 more lines (a new chunk)
- **<g>** – Stop prompting for more
- **<?>** – Display a help string showing possible options
- Any other key – quit showing the file

Filtering Command Output

You can filter the output of certain commands, such as **show**, **more**, and **dir,** so that output lines are displayed only if they include or exclude a specified expression. The filtering options are as follows:

- **include**: Shows all lines that include the specified text.
- **exclude**: Does not show any lines that include the specified text.
- **begin**: Finds the first line that includes the specified text, and shows all lines beginning with that line. All previous lines are excluded.

The syntax of filtered commands is as follows:

- **<command> | include <expression>**
- **<command> | exclude <expression>**
- **<command> | begin <expression>**

The <expression> in these commands is case sensitive.

EXAMPLE

Following is an example of how to filter the **show version** command to display only the last part of the output, beginning with the version information.

SCE# show version begin revision

Redirecting Command Output to a File

You can redirect the output of commands, such as **show**, **more**, and **dir**, to a file. When writing the output of these commands to a file, you can specify either of the following options:

- **redirect**: The new output of the command will overwrite the existing contents of the file.
- **append**: The new output of the command will be appended to the existing contents of the file.

The syntax of redirection commands is as follows:

- **<command> | redirect <file-name>**
- **<command> | append <file-name>**

EXAMPLE

Following is an example of how to do the following:

- Filter the **more** command to display from a *csv* subscriber file only the gold package subscribers.
- Redirect that output to a file named *current_gold_subscribers*. The output should not overwrite existing entries in the file, but should be appended to the end of the file.

SCE# more subscribers_10.10.2004 include gold append current_gold_subscribers

CLI Scripts

The CLI scripts feature allows you to record several CLI commands together as a script and play it back. This is useful for saving repeatable sequence of commands , such as software upgrade. For example, if you are configuring a group of SCE Platforms and you want to run the same configuration commands on each platform, you could create a script on one platform and run it on all the other SCE Platforms.

The available script commands are:

- `script capture`
- `script stop`
- `script print`
- `script run`

To create a script:

Step 1 At the ***SCE#*** prompt, type **`script capture`** *`sample1.scr`* where *`sample1.scr`* is the name of the script.

Step 2 Perform the actions you want to be included in the script.

Step 3 Type **`script stop`**.

The system saves the script.

EXAMPLE:

The following is an example of recording a script for upgrading software.

```
SCE#script capture upgrade.scr
SCE#configure
SCE(config)#boot system new.pkg
Verifying package file...
Package file verified OK.
SCE(config)#exit
SCE#copy running-config startup-config
Writing general configuration file to temporary location...
Extracting files from '/tffs0/images/new.pkg'...
Verifying package file...
```

```
Package file verified OK.
Device ‘/tffs0/’ has 81154048 bytes free, 21447973 bytes are
needed for extraction, all is well.
Extracting files to temp locations...
Renaming temp files...
Extracted OK.
Backing-up general configuration file...
Copy temporary file to final location...
SCE#script stop
SCE#
```

To run the script recorded above, type:

```
SCE#script run upgrade.scr
```

CLI Command Reference

This chapter contains all the CLI commands available on the SCE platform.

Each command description is broken down into the following sub-sections:

Command syntax	The general format of the command.
Description	Description of what the command does.
Default	If relevant, the default setting for the command.
Authorization	The level of user authorization required for using the command.
Mode	The mode (command line) from which the command can be invoked.
Parameters	Description of parameters and switches for the command.
Usage guidelines	Information about when to invoke the command and additional details.
Example	An illustration of how the command looks when invoked. Because the interface is straightforward, some of the examples are obvious, but they are included for clarity.

Syntax and Conventions

The CLI commands are written in the following format:

command *required-parameter* [*optional-parameter*]

[no] is an optional parameter that may appear before the command name.

- When typing commands, you may enclose parameters in double-quote marks, and you *must* do so when there is a space within a parameter name.
- Examples are shown in courier style. **Bold courier** is used to show the commands as you type them and regular courier is used for system prompts and responses.

Note The command prompt, SCE*xxxx*, in the examples and in other sections of the CLI commands represents the type of platform of the SCE, where *xxxx* denotes either 1000 for the SCE1000 platform or 2000 for the SCE2000 platform.

CLI Commands

?

Lists all commands available for the current command mode. You can also use the ? command to get specific information on a keyword or parameter.

To obtain a list of commands that begin with a particular character string, enter the abbreviated command entry immediately followed by a question mark (?). This form of help is called partial help, because it lists only the keywords or arguments that begin with the abbreviation you entered.

Syntax Description

This command has no arguments or keywords

Defaults

This command has no default settings

Command Modes

All

Usage Guidelines

To list a command's associated keywords or arguments, enter a question mark (?) in place of a keyword or parameter on the command line. This form of help is called argument help because it lists the keywords or arguments that apply based on the command, keywords, and arguments you have already entered.

Authorization: User

Examples

The following example shows ways of requesting help using the ? wildcard.

SCE(config)#**ip ?**
default-gateway Sets the default gateway
domain-lookup Enables the IP DNS-based host name-to-address translation
domain-name Define a default domain name
host Add a host to the host table
name-server Specify the address of one or more name servers to use for name and address resolution
route Add IP routing entry
SCE(config)#**ip d?**
default-gateway domain-lookup domain-name
SCE(config)#**ip de?**
default-gateway
SCE(config)#

Related Commands

access-class

Restricts Telnet server access to those addresses listed in the specified access list. Use the [no] form of this command to set the Telnet server to accept access from any address.

access-class *number* **in**

no access-class *number* **in**

Syntax Description

number	An access-list number (1–99).

Defaults

No access list

Command Modes

Line Configuration Mode

Usage Guidelines

Authorization: admin

Examples

The following are examples of the access-class command:

EXAMPLE 1

The following example configures an access class for all Telnet lines.

SCE(config-line)#**access-class 1 in**
SCE(config-line)#

EXAMPLE 2

The following example removes an access class for Telnet lines.

SCE(config-line)#**no access-class in**
SCE(config-line)#

Related Commands

access-list

Adds an entry to the bottom of the specified access list.

access-list *number permission address*

Syntax Description

number	An access-list number (1–99).
permission	Indicates whether the IP address should be allowed or denied access permission as described in the Valid Permission Values table in the Usage Guidelines..
address	Addresses to be matched by this entry as described in the Valid Address Values table in the Usage Guidelines.

Defaults

Command Modes

Global Configuration

Usage Guidelines

Table 2-1 Valid Permission Values

deny	Deny access to list member
permit	Permit access to list member.

Table 2-2 Valid Address Values

any	All IP addresses are matched by this entry. This is equivalent to specifying the address 0.0.0.0 255.255.255.255
ip-address	The IP address or range of IP addresses, matched by this entry. This can be one address in the x.x.x.x format or a range of addresses in the format x.x.x.x y.y.y.y where x.x.x.x specifies the prefix bits common to all IP addresses in the range, and y.y.y.y is a mask specifying the bits that are ignored. In this notation, ‘1’ means bits to ignore. For example, the address 0.0.0.0 255.255.255.255 means any IP address. The address 10.0.0.0 0.1.255.255 means IP addresses from 10.0.0.0 to 10.1.255.255. The address 1.2.3.4 0.0.0.255 means IP addresses from 1.2.3.0 to 1.2.3.255 (A more natural way of expressing the same range is 1.2.3.0 0.0.0.255).

Authorization: admin

Examples

The following example adds entries to the bottom of access-list 1. The first entry permits access to 10.1.1.0 through 10.1.1.255. The second entry denies access to any address. Together this list allows access only to addresses 10.1.1.*.

```
SCE(config)#access-list 1 permit 10.1.1.0 0.0.0.255
SCE(config)#access-list 1 deny any
SCE(config)#
```

The following example defines access list 2, a list that denies access to all IP addresses in the range: 10.1.2.0 to 10.1.2.255, permits access to all other addresses in the range 10.1.0.0 to 10.1.15.255, and denies access to all other IP addresses. Note that since the first range is contained within the second range, the order of entries is important. If they had been entered in the opposite order, the **deny** entry would not have any effect.

```
SCE (config)#access-list 2 deny 10.1.2.0 0.0.0.255
SCE (config)#access-list 2 permit 10.1.0.0 0.0.15.255
SCE(config)#
```

Related Commands

attack-detector default

Defines default thresholds and attack handling action. If a specific attack detector is defined for a particular situation (protocol/attack direction/side), it will override these defaults.

Use the **no** version of this command to delete the user-defined defaults. The system defaults will then be used.

attack-detector default protocol *protocol* **attack-direction** *attack-direction* **side** *side* **action** *action* **open-flows** *open-flows* **ddos-suspected-flows** *ddos-suspected-flows*

no attack-detector default protocol *protocol* **attack-direction** *attack-direction* **side** *side* **action** *action* **open-flows** *open-flows* **ddos-suspected-flows** *ddos-suspected-flows*

Syntax Description

protocol	**TCP, UDP, IMCP, other**
attack-direction	**attack-source, attack-destination, both**
side	**subscriber, network, both**
action	**report, block**
open-flows	Threshold for concurrently open flows
ddos-suspected-flows	Threshold for DDoS-suspected flows.

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Use the *notify-subscriber* keyword to enable subscriber notification.

Use the *dont-notify-subscriber* keyword to disable subscriber notification.

Authorization: admin

Examples

The following examples illustrate the use of the **attack-detector default** command:

EXAMPLE 1:

The following example configures a default attack detector for TCP flows from the attack source.

SCE(config if)#**attack-detector default protocol TCP attack-direction attack-source side both action report open-flows 500 ddos-suspected-flows 75**

EXAMPLE 2:

The following example enables subscriber notification for the specified situation (protocol/attack direction/side).

SCE(config if)#**attack-detector default protocol TCP attack-direction attack-source side both notify-subscriber**

Related Commands

attack-detector <*number*> (on page 2-9)

attack-detector

Enables the specified attack detector and assigns an access control list (ACL) to it.

attack-detector <*number*> **access-list** *access-list*

Syntax Description

number	The attack detector number.
access-list	The number of the ACL containing the IP addresses selected by this detector

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example enables attack detector number "2", and assigns ACL "8".

SCE(config if)# **`attack-detector 2 access-list 8`**

Related Commands

attack-detector <number>

Configures a specific attack detector for a particular situation (protocol/attack direction/side) with the assigned number.

Use the **no** form of this command to delete the specified attack detector.

attack-detector <*number*> **protocol** *protocol* **attack-direction** *attack-direction* **side** *side action* **open-flows** *open-flows* **ddos-suspected-flows** *ddos-suspected-flows*

no attack-detector <*number*> **protocol** *protocol* **attack-direction** *attack-direction* **side** *side action* **open-flows** *open-flows* **ddos-suspected-flows** *ddos-suspected-flows*

Syntax Description

number	Assigned number for attack-detector command.
protocol	**TCP, UDP, IMCP, other**
attack-direction	**attack-source, attack-destination, both**
side	**subscriber, network, both**
action	**report, block**
open-flows	Threshold for concurrently open flows
ddos-suspected-flows	Threshold for DDoS-suspected flows

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Use the *notify-subscriber* keyword to enable subscriber notification.

Use the *dont-notify-subscriber* keyword to disable subscriber notification.

Authorization: admin

Examples

The following examples illustrate the use of the **attack-detector <number>** command:

EXAMPLE 1:

The following example configures the attack detector number "2".

SCE(config if)#attack-detector 2 protocol TCP attack-direction attack-source side both action report open-flows 500 ddos-suspected-flows 75

EXAMPLE 2:

The following example deletes attack detector number "2".

SCE(config if)#**no attack-detector 2**

Example 3:

The following example disables subscriber notification for attack detector number "2".

SCE(config if)#**attack-detector 2 dont-notify-subscriber**

Related Commands

attack-detector default (on page 2-6)

attack-filter (LineCard Interface Configuration)

Enables/disables attack detection.

attack-filter

no attack-filter

Syntax Description

This command has no arguments or keywords.

Defaults

attack-filter is disabled

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example disables attack detection.

SCE(config if)#**no attack-filter**

Related Commands

attack-filter (Privileged Exec)

The **attack-filter** command prevents attack filtering for a specified IP address/protocol. If filtering is already in process, it will be stopped.

When attack filtering has been stopped, it remains stopped until explicitly restored by another CLI command (either specific or general). Use the **no** form of this command to restore attack filtering.

When using the **force-filter** keyword, it forces attack filtering for a specified IP address/protocol. When attack filtering has been forced, it continues until explicitly stopped by another CLI command (either specific or general). Use the **no** form of this command to stop attack filtering.

attack-filter *slot-number* **ip** *ip-address* **protocol** *protocol* **attack-direction** *attack-direction* **side** *side* [**dont-filter**]
attack-filter *slot-number* **ip** *ip-address* **action** *action* **protocol** *protocol* **attack-direction** *attack-direction* **side** *side* [**force-filter**]
no attack-filter *slot-number* [**dont-filter**] [**all**]
no attack-filter *slot-number* [**force-filter**] [**all**]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
ip-address	IP address from which traffic will not be filtered.
action	`report, block`
protocol	`TCP, UDP, IMCP, other`
attack-direction	`attack-source, attack-destination, both`
side	`subscriber, network, both`

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

After configuring the attack detectors, the SCE Platform automatically detects attacks and handles them according to the configuration. However, there are scenarios in which a manual intervention is desired, either for debug purposes, or because it is not trivial to reconfigure the SCE attack-detectors properly.

The user can use the CLI attack filtering commands to do the following:

- Prevent/stop filtering of an attack related to a specified IP address
- Force filtering of an attack related to a specified IP address

Attack filtering can be prevented for a specified IP address/protocol by executing a **dont-filter** CLI command. If filtering is already in process, it will be stopped. When attack filtering has been stopped, it remains stopped until explicitly restored by another CLI command (either **force-filter** or **no dont-filter**).

Attack filtering can be forced for a specified IP address/protocol. If filtering is already in process, it will be stopped. Forced attack filtering will continue until undone by an explicit CLI command (either **no force-filter** or **dont-filter**).

Use the all keyword to restore or stop all filtering.

Authorization: admin

Examples

The following are examples of the **attack-filter** command:

EXAMPLE 1:

The following example prevents attack filtering for the specified conditions.

***SCE*#attack-filter 0 ip 10.10.10.10 protocol TCP attack-direction attack-source side both dont-filter**
***SCE*#**

EXAMPLE 2:

The following example restores all attack filtering.

***SCE*#no attack-filter 0 dont-filter all**

EXAMPLE 3:

The following example forces attack filtering.

***SCE*#attack-filter 0 action block ip 10.10.10.10 protocol TCP attack-direction attack-source side both**

EXAMPLE 4:

The following example stops all forced attack filtering.

***SCE*#no attack-filter 0 force-filter all**

Related Commands

attack-filter subscriber-notification ports

Specifies up to three ports as subscriber notification ports. TCP Traffic from the subscriber side to these ports will never be blocked by the attack filter, leaving them always available for subscriber notification.

Use the [**no**] form of this command to remove all ports from the subscriber notification port list.

attack-filter subscriber-notification ports *ports*

no attack-filter subscriber-notification ports *ports*

Syntax Description

ports	Port numbers. Up to 3 ports can be specified as subscriber notification ports.

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example defines adds ports to the subscriber notification port list.

SCE(config if)# **attack-filter subscriber-notification ports 100,101,102**

Related Commands

auto-negotiate (GigabitEthernet only)

Configures the GigabitEthernet Interface auto-negotiation mode. Use this command to either enable or disable auto-negotiation. When set to no auto-negotiate, auto-negotiation is always disabled, regardless of the connection mode.

auto-negotiate
no auto-negotiate
default auto-negotiate

Syntax Description

This command has no arguments or keywords.

Defaults

On for active connection mode; Off for passive connection mode

Command Modes

GigabitEthernet Interface Configuration

Usage Guidelines

Note that auto-negotiation does not work when the SCE Platformis connected via an optical splitter.

Authorization: admin

Examples

The following example configures the SCE Platform to perform no auto-negotiation.

SCE(config if)#**no auto-negotiate**
SCE(config if)#

Related Commands

bandwidth

Sets Ethernet shaping.

bandwidth *bandwidth* **burst-size** *burstsize*

Syntax Description

bandwidth	bandwidth measured in kbps.
burstsize	Burst size in bytes.

Defaults

Bandwidth = 100000K (100 Mbps)

burst-size = 5000 (5K bytes)

Command Modes

FastEthernet Interface Configuration
GigabitEthernet Interface Configuration

Usage Guidelines

This command is valid for the FastEthernet and GigabitEthernet line interfaces only.

```
Interface FastEthernet 0/#
Interface GigabitEthernet 0/#
```

Authorization: admin

Examples

The following sets bandwidth and burst size.

SCE(config-if)#**bandwidth 100000 burstsize 5000**
SCE(config-if)#

Related Commands

blink

Blinks a slot LED for visual identification. Use the **no** form of this command to stop the slot blinking.

blink slot *slot-number*
no blink slot *slot-number*

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Not blinking

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example configures the SCE Platform to stop blinking.

***SCE*#no blink slot 0**
***SCE*#**

Related Commands

show blink (on page 2-145)

boot system

Specifies a new package file to install. The SCE Platform extracts the actual image file(s) from the specified package file only during the **copy running-config startup-config** command.

When using the **no** version of this command, you do not have to specify the package-file-name.

boot system ftp://*username*[:*password*]**@***server-address*[:*port*]/*path/source-file destination-file*

no boot system ftp://*username*[:*password*]**@***server-address*[:*port*]/*path/source-file destination-file*

Syntax Description

ftp://…destination-file The ftp site and path of a package file that contains the new firmware. The filename should end with the .pkg extension.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Use this command to upgrade the SCE Platform embedded firmware. The package file is verified for the system and checked that it is not corrupted. The actual upgrade takes place only after executing the **copy running-config startup-config** command and rebooting the SCE Platform.

Authorization: admin

Examples

The following example upgrades the system.

SCE(config)#**boot system ftp://vk:vk@10.1.1.230/downloads/SENum.pkg.pkg**

Verifying package file…

Package file verified OK.

SCE(config)#**exit**

SCE#**copy running-config startup-config**

Backing –up configuration file…

Writing configuration file…

Extracting new system image…

Extracted OK.

Related Commands

calendar set

Sets the system calendar. The calendar is a system clock that continues functioning even when the system shuts down.

calendar set *hh:mm:ss day month year*

Syntax Description

hh:mm:ss	Current local time in hours in 24-hour format, minutes and seconds (HH:MM:SS).
day	Current day (date) in the month.
month	Current month (by three-letter abbreviated name).
year	Current year using a 4-digit number.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Always coordinate between the calendar and clock by using the `clock read-calendar` command after setting the calendar.

For further information on setting the clock, see Setting the Clock.

Authorization: admin

Examples

The following example sets the calendar to 20 minutes past 10 AM, October 13, 2001, synchronizes the real-time clock to the calendar time, and displays the result.

***SCE*#calendar set 10:20:00 13 oct 2001**
***SCE*#clock read-calendar**
***SCE*#show calendar**

```
10:20:03  UTC  THU  October  13  2001
```

***SCE*#show clock**

```
10:20:05  UTC  THU  October  13  2001
```

***SCE*#**

Related Commands

show calendar (on page 2-146)

show clock (on page 2-147)

cd

Changes the path of the current working directory.

cd *new-path*

Syntax Description

new-path	The path name of the new directory. This can be either a full path or a relative path.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

The new path should already have been created in the local flash file system.

Authorization: admin

Examples

The following example shows the current directory and then changes the directory to the log directory located under the root directory.

***SCE*#pwd**
tffs0
***SCE*#cd log**
***SCE*#pwd**
tffs0:log
***SCE*#**

Related Commands

clear arp-cache

Deletes all dynamic entries from the ARP cache.

The Address Resolution Protocol (ARP) is a TCP/IP protocol that converts IP addresses to physical addresses. Dynamic entries are automatically added to and deleted from the cache during normal use. Entries that are not reused age and expire within a short period of time. Entries that are reused have a longer cache life.

clear arp-cache

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example clears the ARP cache.

***SCE*#clear arp-cache**
***SCE*#**

Related Commands

clear interface LineCard

Clears the LineCard Interface counters.

clear interface LineCard *slot-number* **counters**

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example clears the Line-Card 0 counters.

***SCE*#clear interface LineCard 0 counters**
***SCE*#**

Related Commands

clear interface LineCard subscriber

Clears all anonymous subscribers in the system.

clear interface LineCard *slot-number* **subscriber anonymous all**

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example clears all anonymous subscribers.

***SCE*#clear interface LineCard 0 subscriber anonymous all**

Related Commands

no subscriber (on page 2-111)

clear interface LineCard subscriber db counters

Clears the "total" and "maximum" subscribers database counters.

clear interface LineCard *slot-number* **subscriber db counters**

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example clears all anonymous subscribers.

***SCE*#clear interface LineCard 0 subscriber db counters**

Related Commands

clear interface LineCard traffic-counter

Clears the specified traffic counter.

clear interface LineCard *slot-number* **traffic-counter** *name* [**all**]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
name	Name of the traffic counter to be cleared.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the **all** keyword to clear all traffic counters.

Authorization: admin

Examples

The following example clears the traffic counter name counter1.

***SCE*#clear interface LineCard 0 traffic-counter name counter1**

Related Commands

clear logger

Clears SCE Platform logger (user log files). This erases the information stored in the user log files.

When using the **counters** keyword, it clears the counters of the SCE Platform logger (user log files). The counters keep track of the number of info, warning, error and fatal messages.

When using the **nv-counters** keyword, it clears the non-volatile counters for the entire log or only the specified SCE Platform. These counters are not cleared during bootup, and must be cleared explicitly by using this command.

clear logger [**device** *user-file-log*|*debug-file-log*] [**counters**|**nv-counters**]

Syntax Description

device	The device name to be cleared, either user-file-log or debug-file-log

Defaults

This command has no default settings.

Command Modes

Privileged EXEC

Usage Guidelines

The users log files have a size limit, with new entries overwriting the oldest entries. Therefore, there is no need to regularly clear the log files. Use this operation when you are certain that the information contained on the logs is irrelevant and might be confusing (For example, when re-installing the system at a new site, whose administrators should not be confused with old information).

Authorization: admin

Examples

The following examples illustrate the use of the **clear logger** command:

EXAMPLE 1:

The following example clears the SCE Platformuser file logs:

***SCE*#clear logger device user-file-log**
Are you sure?**Y**
***SCE*#**

EXAMPLE 2:

The following example clears the user log file SCE Platformcounters.

***SCE*#clear logger device user-file-log counters**
Are you sure?**Y**
***SCE*#**

EXAMPLE 3:

The following example clears the user log file non-volatile counters.

***SCE*#clear logger device user-file-log nv-counters**
Are you sure?**Y**
***SCE*#**

Related Commands *show logger device User-File-Log* (on page 2-196)

clear RDR-formatter

Clears the RDR formatter counters.

clear RDR-formatter

Syntax Description	This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example clears the RDR-formatter counters.

***SCE*#clear RDR-formatter**
***SCE*#**

Related Commands

show RDR-formatter (on page 2-203)

clock read-calendar

Synchronizes clocks by setting the system clock from the calendar.

clock read-calendar

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example updates the system clock from the calendar.

***SCE*#clock read-calendar**
***SCE*#**

Related Commands

clock set

Manually sets the system clock.

clock set *hh:mm:ss day month year*

Syntax Description

hh:mm:ss	Current local time in hours in 24-hour format, minutes and seconds (HH:MM:SS).
day	Current day (date) in the month.
month	Current month (by three-letter abbreviated name).
year	Current year using a 4-digit number.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Always coordinate between the calendar and clock by using the **clock update-calendar** command after setting the clock.

Authorization: admin

Examples

The following example sets the clock to 20 minutes past 10 PM, October 13, 2001.

***SCE*#clock set 22:20:00 13 oct 2001**
***SCE*#clock update-calendar**
***SCE*#show clock**

```
22:21:10  UTC  THU  October  13  2001
```

***SCE*#show calendar**

```
22:21:18  UTC  THU  October  13  2001
```

***SCE*#**

Related Commands

clock update-calendar (on page 2-37)

show calendar (on page 2-146)

show clock (on page 2-147)

clock summertime

Configures the SCE Platform to automatically switch to daylight savings time on a specified date, and also to switch back to standard time. In addition, the three-letter time zone code can be configured to vary with daylight savings time if required. (For instance, in the eastern United States, standard time is designated EST, and daylight savings time is designated EDT).

Use the **no** form of this command to cancel the daylight savings time transitions configuration.

clock summertime
no clock summertime

The format of the command varies somewhat, depending on how the dates for the beginning and end of daylight savings time are determined for the particular location:

- recurring: If daylight savings time always begins and ends on the same day every year, (as in the United States):

Use the **clock summer-time recurring** command

  - The *year* parameter is not used

- not recurring: If the start and end of daylight savings time is different every year, (as in Israel):

Use the **clock summer-time** command

  - The *year* parameter must be specified

General guidelines for configuring daylight savings time transitions:

- Specify the three letter time zone code for daylight savings time.
- recurring: specify a day of the month (week#|first|last/day of the week/month).
- not recurring: specify a date (month/day of the month/year).
- Define two days:
  - Day1 = beginning of daylight savings time.
  - Day2 = end of daylight savings time.

  In the Southern hemisphere, month2 must be before month1, as daylight savings time begins in the fall and ends in the spring.
- Specify the exact time that the transition should occur (24 hour clock).
  - Time of transition into daylight savings time: according to local standard time.
  - Time of transition out of daylight savings time: according to local daylight savings time.

For the **clock summer-time recurring** command, the default values are the United States transition rules:

  - Daylight savings time begins: 2:00 (AM) on the first Sunday of April.
  - Daylight savings time ends: 2:00 (AM) on the last Sunday of October.

Syntax Description

zone	The 3-letter code for the time zone for daylight savings.
week1/week2	The week of the month on which daylight savings begins (week1) and ends (week2). A day of the week, such as Monday, must also be specified. The week/day of the week is defined for a recurring configuration only. Default: Not used
day1/day2	The day of the week on which daylight savings begins (day1) and ends (day2). For recurrent configuration: day is a day of the week, such as Sunday. Use the keywords first/last to specify the occurrence of a day of the week in a specified month: For example: last Sunday March. For non-recurrent configuration: day is a day in the month, such as 28. Default: day1 = first Sunday, day2 = last Sunday
month1/month2	The month in which daylight savings begins (*month1*) and ends (*ends2)*. Default: month1 = April, month2 = October
year1/year2	The year in which daylight savings begins (month1) and ends (ends2). For non - recurring configuration only. Default = not used
time1/time2	The time of day (24-hour clock) at which daylight savings begins (*time1*) and ends (*time2)*. Required for all configurations. Default: time1/time2 = 2:00
offset	The difference in minutes between standard time and daylight savings time. Default = 60

Defaults

recurring, offset = 60 minutes

- Daylight savings time begins: 2:00 (AM) on the first Sunday of April.
- Daylight savings time ends: 2:00 (AM) on the last Sunday of October.

Command Modes

Global Configuration

Usage Guidelines

Use the **recurring** keyword to enable subscriber notification.

Use the **first/last** keywords to specify the occurrence of a day of the week in a specified month: For example: last Sunday March.

Use a specific date including the year for a not recurring configuration. For example: March 29, 2004.

Use week/day of the week/month (no year) for a recurring configuration:

- Use first/last occurrence of a day of the week in a specified month. For example: last, Sunday, March (the last Sunday in March).
- Use the day of the week in a specific week in a specified month. For example: 4,Sunday, March (the fourth Sunday in March). This would be different from the last Sunday of the month whenever there were five Sundays in the month.

Authorization: admin

Examples

The following examples illustrate the use of the **clock summertime** command:

EXAMPLE 1:

The following example shows how to configure recurring daylight savings time for a time zone designated "DST" as follows:

- Daylight savings time begins: 0:00 on the last Sunday of March.
- Daylight savings time ends: 23:59 on the Saturday of fourth week of November.
- Offset = 1 hour (default)

SCE(config)#**clock summer-time DST recurring last Sunday March 00:00 4 Saturday November 23:59**

EXAMPLE 2:

The following example shows how to configure non-recurring daylight savings time for a time zone designated "DST" as follows:

- Daylight savings time begins: 0:00 on April 16, 2005.
- Daylight savings time ends: 23:59 October 23, 2005.
- Offset = 1 hour (default)

SCE(config)#**clock summer-time DST April 16 2005 00:00 October 23 2005 23:59**

EXAMPLE 3:

The following example shows how to cancel the daylight savings configuration.

From the ***SCE***`(config)#` prompt, type **no clock summer-time** and press **Enter**.

SCE(config)#**no clock summer-time**

Related Commands

clock timezone

Sets the time zone. Use the no version of this command to remove current time zone setting. The purpose of setting the time zone is that the system can correctly interpret time stamps data coming from systems located in other time zones.

clock timezone *zone hours* [*minutes*]

no clock timezone

Syntax Description

zone	The name of the time zone to be displayed.
hours	The hours offset from GMT (UTC). This must be an integer in the range –23 to 23.
minutes	The minutes offset from GMT (UTC). This must be an integer in the range of 0 to 59. Use this parameter to specify an additional offset in minutes when the offset is not measured in whole hours.

Defaults

GMT (hours = 0)

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example sets the time zone to Pacific Standard Time with an offset of 10 hours behind GMT.

SCE(config)#**clock timezone PST –10**
SCE(config)#

Related Commands

clock update-calendar

Synchronizes clocks by setting the calendar from the system clock.

clock update-calendar

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example updates the calendar according to the clock.

***SCE*#clock update-calendar**
***SCE*#**

Related Commands

clock set (on page 2-31)

show calendar (on page 2-146)

show clock (on page 2-147)

configure

Enables the user to move from Privileged Exec Mode to Configuration Mode.

configure

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Privileged EXEC

Usage Guidelines

After the user enters the **configure** command, the system prompt changes from <`host-name`># to <`host-name`>(`config`)#, indicating that the system is in Global Configuration Mode. To leave Global Configuration Mode and return to the Privileged Exec Mode prompt, type **`exit`**.

Authorization: admin

Examples

The following example enters the Global Configuration Mode.

***SCE*#configure**
SCE(config)#

Related Commands

exit (on page 2-53)

connection-mode (SCE 1000 platform)

Sets the connection mode to either inline (on the wire) or receive-only (using beam splitter or switch).

connection-mode *connection-mode* **on-failure** *on-failure*

Syntax Description

connection-mode	**`inline`** or **`receive-only`** setting. **`inline`** SCE Platform is connected in a bump-in-the-wire topology. **`receive-only`** SCE Platform is connected in a out of the line topology using a beam splitter or switch.
On-failure	determines system behavior on failure of the SCE Platform. (inline topologies only) **`Bypass`** **`cutoff`**

Defaults

connection mode = inline

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example sets the connection-mode to inline and the on-failure mode to cutoff.

SCE(config if)#**connection-mode inline on-failure cutoff**

Related Commands

connection-mode (SCE 2000 platform)

Sets the connection mode parameters.

connection-mode *connection-mode* **physically-connected-links** *physically-connected-links* **Priority** *Priority* **On-failure** *On-failure*

Syntax Description

connection mode **`inline`**: single SCE Platform inline
`receive-only`: single SCE Platform receive-only
`inline-cascade`: two SCE Platforms inline
`receive-only-cascade`: two SCE Platforms receive-only

physically-connected-links The number of the link connected to the SCE Platform. (two SCE Platform topology only)
link 0
link 1

Priority Defines which is the primary SCE Platform.(two SCE Platform topologies only).
`primary`
`secondary`

On-failure Determines system behavior on failure of the SCE Platform. (inline topologies only)
`Bypass`
`cutoff`

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example show how to configure the primary SCE Platform in a two-SCE Platform inline topology. Link "0" is connected to this SCE Platform, and the behavior of the SCE Platform if a failure occurs is “bypass”.

SCE(config if)#**connection-mode inline-cascade physically-connected-links link-0 priority primary on-failure bypass**
SCE(config if)#

Related Commands

copy

Copies any file from a source directory to a destination directory on the local flash file system.

copy *source-file destination-file*

Syntax Description

source-file The name of the original file.

destination-file The name of the new destination file.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Both file names should be in 8.3 format, that is, there are a maximum of 8 characters before the period and three characters following it.

Authorization: admin

Examples

The following example copies the local analysis.sli file located in the root directory to the applications directory.

***SCE*#copy analysis.sli applications/analysis.sli**
***SCE*#**

Related Commands

copy ftp://

Downloads a file from a remote station to the local flash file system, using FTP.

copy ftp://*username*[*:password*]**@***server-address*[*:port*]/*path*/*source-file destination-file*

Syntax Description

username	The username known by the FTP server.
password	The password of the given username.
server-address	The dotted decimal IP address of the FTP server.
Port	Optional port number on the FTP server.
source-file	The name of the source file located in the on the server.
destination-file	The name of the file to be saved in the local flash file system. The file should be in 8.3 format, that is 8 digits, dot, then 3 digits.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the following syntax for remote upload/download using FTP:

```
ftp://username[:password]@server-address[:port]/path/file
```

You can configure keyword shortcuts for the **copy** command using the following commands:

- **IP ftp password** to configure a password shortcut.
- **IP ftp username** to configure a username shortcut.

Authorization: admin

Examples

The following example downloads the ftp.sli file from the host 10.1.1.105 with user name “vk” and password “vk”.

***SCE*#copy ftp://vk:vk@10.1.1.105/p:/applications/ftp.sli**
***SCE*#**

Related Commands

copy-passive

Uploads or downloads a file using passive FTP.

copy-passive *source-file* **ftp:**//*username*[:*password*]**@***server-address*[:*port*]/*path*/*destination-file* **[overwrite**]

Syntax Description

source-file	The name of the source file located in the local flash file system.
username	The username known by the FTP server.
password	The password of the given username.
server-address	The dotted decimal IP address.
port	Optional port number on the FTP server.
destination-file	The name of the file to be created in the FTP server.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the following format for remote upload/download using FTP:
`ftp://username[:password]@serveraddress[:port]/path/file`

Use the **overwrite** keyword to permit the command to overwrite an existing file.

You can configure keyword shortcuts for the **`copy`** command using the following commands:

- **`IP ftp password`** to configure a password shortcut.
- **`IP ftp userName`** to configure a username shortcut.

Authorization: admin

Examples

The following example performs the same operation as the previous copy ftp example using passive FTP.

***SCE*#copy-passive appl/analysis.sli**
ftp://myname:mypw@10.1.1.105/p:/applications/analysis.sli
***SCE*#**

Related Commands

copy running-config startup-config

Builds a configuration file with general configuration commands called `config.txt`, which is used in successive boots.

copy running-config startup-config

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Privileged EXEC

Usage Guidelines

This command must be entered to save newly configured parameters, so that they will be effective after a reboot. You can view the running configuration before saving it using the **more running-config** command.

The old configuration file is automatically saved in the `tffs0:system/prevconf` directory.

Authorization: admin

Examples

The following example saves the current configuration for successive boots.

***SCE*#copy running-config startup-config**
Backing-up configuration file...
Writing configuration file...
SCE#

Related Commands

copy source-file ftp://

Uploads a file to a remote station, using FTP.

copy *source-file* **ftp:**//*username*[*:password*]**@***server-address*[*:port*]/*path*/*destination-file*

Syntax Description

source-file	The name of the source file located in the local flash file system.
username	The username known by the FTP server.
password	The password of the given username.
server-address	The dotted decimal IP address.
port	Optional port number on the FTP server.
destination-file	The name of the file to be created in the FTP server.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the following format for remote upload/download using FTP:
`ftp://username[:password]@serveraddress[:port]/path/file`

You can configure keyword shortcuts for the **`copy`** command using the following commands:

- **`IP ftp password`** to configure a password shortcut.
- **`IP ftp userName`** to configure a username shortcut.

Authorization: admin

Examples

The following example uploads the analysis.sli file located on the local flash file system to the host 10.1.1.105.

***SCE*#copy /appl/analysis.sli ftp://myname:mypw@10.1.1.105/p:/applications/analysis.sli**
***SCE*#**

Related Commands

default subscriber template all

Removes all user-defined subscriber templates from the system. The default template only remains.

default subscriber template all

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes all user-defined subscriber templates.

SCE(config if)# **default subscriber template all**
SCE(config if)#

Related Commands

delete

Deletes a file from the local flash file system.

Use the recursive switch to delete a complete directory and its contents. When used with the recursive switch, the filename argument specifies a directory rather than a file.

delete *file-name* [/**recursive**]

Syntax Description

file-name	The name of the file or directory to be deleted.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the delete command:

EXAMPLE 1:

The following example deletes the oldlog.txt file.

***SCE*#delete oldlog.txt**
***SCE*#**

EXAMPLE 2:

The following example deletes the oldlogs directory.

***SCE*#delete oldlogs /recursive**
3 files and 1 directories will be deleted.
Are you sure? **y**
3 files and 1 directories have been deleted.
***SCE*#**

Related Commands

dir

Displays the files in the current directory.

dir [**applications**] [**-r**]

Syntax Description

applications	Filters the list of files to display only the application files in the current directory.
-r	Includes all files in the subdirectories of the current directory as well as the files in the current directory.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example displays the files in the current directory (root).

```
SCE#dir
File list for /tffs0/
512     TUE JAN 01 00:00:00 1980    LOGDBG              DIR
512     TUE JAN 01 00:00:00 1980    LOG                 DIR
7653    TUE JAN 01 00:00:00 1980    FTP.SLI
29      TUE JAN 01 00:00:00 1980    SCRIPT.TXT
512     TUE JAN 01 00:00:00 1980    SYSTEM              DIR
SCE#
```

Related Commands

disable

Moves the user from a higher level of authorization to a lower user level.

disable [*level*]

Syntax Description

level	User authorization level (0, 10, 15) as specified in Login and User Levels, in table Authorization Levels.

Defaults

This command has no default settings.

Command Modes

Exec

Usage Guidelines

Use this command with the level option to lower the user privilege level. If a level is not specified, it defaults to User mode.

Authorization: user

Examples

The following example shows exits from root to admin mode:

SCE#>**disable 10**
SCE#

Related Commands

duplex

Configures the duplex operation of the FastEthernet Interface to either half duplex, or full duplex. **auto** means auto-negotiation (do not force duplex on the link).

duplex *mode*
no duplex *mode*

Syntax Description		
	mode	Set to **auto**, **full** or **half** to indicate the duplex mode.

Defaults

Auto

Command Modes

FastEthernet Interface Configuration

Usage Guidelines

Changing this configuration takes effect only if the speed (see *speed* (on page 2-245)) is not configured to **auto**.

Authorization: admin

Examples

The following example configures the FastEthernet port to half duplex mode.

SCE(config if)#**duplex half**
SCE(config if)#

Related Commands

enable

Enables the user to access a higher authorization level.

enable [*level*]

Syntax Description

level	User authorization level (0, 10, 15) as specified in in Login and User Levels, in table Authorization Levels.

Defaults

admin

Command Modes

Exec

Usage Guidelines

If a level is not specified, the level defaults to the Privileged Exec mode, level 10.

Authorization: User

Examples

The following example accesses the administrator authorization level. Note that the prompt changes from ***SCE>*** to ***SCE#***, indicating that the privilege is the administrator privilege level.

SCE>**enable**
Password:[**pwd**]
SCE#

Related Commands

enable password

Configures a password for the specified authorization level, thus preventing unauthorized users from accessing the SCE Platform.

enable password [*level level*] [*encryption-type*] *password*

Syntax Description

level	User authorization level (0, 10, 15) as specified in Login and User Levels, in table Authorization Levels. If no level is specified, the default is Admin (10).
encryption-type	If you want to enter the encrypted version of the password, set the *encryption type* to **5**, to specify the algorithm used to encrypt the password.
password	A regular or encrypted password set for the access level. If you specify *encryption-type*, you must supply an encrypted password.

Defaults

password: **pcube** or **cisco**

Command Modes

Global Configuration

Usage Guidelines

After the command is entered, any user executing the **enable** command must supply the specified password.

- Passwords must be at least 4 and no more than 100 characters long.
- Passwords can contain any printable characters.
- Passwords must begin with a letter.
- Passwords cannot contain spaces.
- Passwords are case-sensitive.

Authorization: admin

Examples

The following example sets a level 10 password as a123*man.

```
SCE(config)#enable password level 10 a123*man
SCE(config)#
```

Related Commands

no enable password (on page 2-101)

exit

Exits the current mode and reverts to the mode used prior to the current mode.

exit

Syntax Description	This command has no arguments and keywords.

Defaults

0

Command Modes

All

Usage Guidelines

Use this command each time you want to exit a mode. The system prompt changes to reflect the lower-level mode.

Authorization: admin

Examples

The following example exits from the Configure Interface Mode to Global Configuration Mode and then to Privileged Exec Mode.

SCE(config if)#**exit**
SCE(config)#**exit**
SCE#

Related Commands

failure-recovery operation-mode

Specifies the operation mode to be applied after boot resulting from failure. When using the **no** or **default** switch, you do not have to specify the mode.

failure-recovery operation-mode *mode*

no failure-recovery operation-mode

default failure-recovery operation-mode

Syntax Description

mode	**operational** or **non-operational**. Indicates whether the system will boot as operational or not following a failure.

Defaults

mode = operational

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example sets the system to boot as operational after a failure

SCE(config)#**failure-recovery operation-mode operational**
SCE(config)#

Related Commands

force failure-condition (SCE 2000 only)

Forces a virtual failure condition, and exits from the failure condition, when performing an application upgrade.

force failure-condition

no force failure-condition

Syntax Description	This command has no arguments or keywords

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example forces a virtual failure condition.

SCE(config if)#**force failure-condition**

Related Commands

help

Prints a list of keyboard bindings (shortcut commands).

help bindings

Syntax Description	This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Exec

Usage Guidelines

Authorization: User

Examples

The following example shows the partial output of the help bindings command.

SCE>**help bindings**

```
Line Cursor Movements
---------------------
Ctrl-F /->      Moves cursor one character to the right.
Ctrl-B /<-      Moves cursor one character to the left.
Esc-F           Moves cursor one word to the right.
Esc-B           Moves cursor one word to the left.
Ctrl-A          Moves cursor to the start of the line.
Ctrl-E          Moves cursor to the end of the line.
Esc F           Moves cursor forward one word.
Esc B           Moves cursor backward one word.


Editing
-------
Ctrl-D          Deletes the character where the cursor is located.
Esc-D           Deletes from the cursor position to the end of the word.
Backspace       Deletes the character before the current location of the cursor.
Ctrl-H          "  "  "  "  "  "  "  "  "  "
Ctrl-K          Deletes from the cursor position to the end of the line.
Ctrl-U          Deletes all characters from the cursor to the beginning of the line.
Ctrl-X          "  "  "  "  "  "  "  "  "  "
Ctrl-W          Deletes the word to the left of the cursor.
Ctrl-Y          Recall the last item deleted.


Help and Operation Features
---------------------------

?               Argument help.
<Tab>           Toggles between possible endings for the typed prefix.
<Esc><Tab>      Displays all the possible arguments backwards.
Ctrl-I          <TAB>
```

SCE>

Related Commands

history

Enables the history feature, that is, a record of the last command lines that executed. Use the no form of this command to disable history.

history
no history

Syntax Description

This command has no arguments or keywords.

Defaults

History is enabled.

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example enables the **history** feature.

***SCE*#history**
***SCE*#**

The following example disables the **history** feature.

***SCE*#no history**
***SCE*#**

Related Commands

history size

Sets the number of command lines that the system records in the history.

history size *size*
no history size

Syntax Description

size	The number of command lines stored in the history of commands for quick recall.

Defaults

10 lines

Command Modes

Privileged EXEC

Usage Guidelines

The size of the history buffer can be any number from 0-50. Use the [**no**] form of this command to restore the default size.

Authorization: admin

Examples

The following example sets the history buffer size to 50 command lines.

***SCE*#history size 50**
***SCE*#**

Related Commands

hostname

Modifies the name of the SCE Platform. The host name is part of the displayed prompt.

hostname *host-name*

Syntax Description

host-name	The new host name.

Defaults

SCE

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example changes the host name to MyHost.

SCE(config)#>**hostname MyHost**
MyHost(config)#>**psnn**

Related Commands

interface FastEthernet

Enters FastEthernet Interface Configuration mode.

interface FastEthernet *slot-number/interface-number*

Syntax Description

slot-number The number of the identified slot. Enter a value of **0**.

interface-number The FastEthernet interface number. Enter a value of **0** to configure the management port, or a value of **1 - 4** to configure one of the line ports.

Defaults

Command Modes

Global Configuration

Usage Guidelines

Use this command to configure the management port for the **SCE1000** and the **SCE2000** platforms.

This command is used to configure the line ports only for the **SCE 2000 4/8xFE**.

The system prompt is changed to reflect the Fast Ethernet Interface Configuration mode. To return to the Global Configuration Mode, type **exit**.

Authorization: admin

Examples

The following example enters into FastEthernet Configure Interface Mode.

SCE(config)#**interface FastEthernet 0/0**
SCE(config if)#

Related Commands

interface GigabitEthernet

Enters GigabitEthernet Interface Configuration mode.

interface GigabitEthernet *slot-number/interface-number*

Syntax Description

slot-number Enter a value of **0**.

interface-number The GigabitEthernet interface number. Enter a value of **1 - 4** to configure one of the line ports.

Defaults

Command Modes

Global Configuration

Usage Guidelines

Use this command to configure the line ports only for **SCE 2000 4xGBE** platform. This command is not used for configuring the management ports.

The SCE 1000 platform uses line ports 1 - 2 and the SCE 2000 platform uses line ports 1 - 4.

The system prompt is changed to reflect the GigabitEthernet Interface Configuration mode. To return to the Global Configuration Mode, type **exit**.

Authorization: admin

Examples

The following example enters into GigabitEthernet Configure Interface Mode to configure line port 1.

SCE(config)#**interface GigabitEthernet 0/1**
SCE(config if)#

Related Commands

interface LineCard

Enters LineCard Interface Configuration Mode.

interface LineCard *slot-number*

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

The system prompt is changed to reflect the Line Card Configuration mode. To return to the Global Configuration Mode, type **exit**.

Authorization: admin

Examples

The following example enters LineCard Interface Configuration Mode.

SCE(config)#**interface LineCard 0**
SCE(config if)#

Related Commands

ip access-class

Set the global IP access class. The access list defined here contains the definitions for all IP addresses with permission to access the SCE Platform system. IP addresses not permitted in this access list cannot access or detect the SCE Platform, that is, even a ping command will receive no response if it is not from a permitted IP address.

ip access-class *number*

Syntax Description

number	The access-class number.

Defaults

none (all IP addresses can access the system)

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example sets access list 1 as the global access list.

SCE(config)#**ip access-class 1**
SCE(config)#

Related Commands

no ip access-class (on page 2-102)

ip address

Sets the IP address and subnet mask of the FastEthernet Management Interface.

ip address *new-address subnet-mask*

Syntax Description

new-address The new IP address.

subnet-mask The network mask for the associated IP network.

Defaults

Command Modes

FastEthernet Interface Configuration

Usage Guidelines

If there is a routing table entry mapped to the old address, but not to the new address, the command may fail.

This command is valid for the management interface only, **Interface FastEthernet 0/0**.

Authorization: admin

Examples

The following example sets the IP address of the SCE Platform to 10.1.1.1 and the subnet mask to 255.255.0.0.

SCE(config if)#**ip address 10.1.1.1 255.255.0.0**
SCE(config if)#

Related Commands

ip advertising

Enables IP advertising. If the destination and/or interval is not configured, the default values are assumed.

Use the **no** version of the command to disable IP advertising.

Use the **default** version of the command to restore IP advertising destination or interval to the default values.

ip advertising [*destination destination*] [*interval interval*]
no ip advertising
default ip advertising

Syntax Description

destination	The IP address of the destination for the ping requests Default: 127.0.0.1
interval	The frequency of the ping requests in seconds Default: 300 seconds

Defaults

disabled

destination = 127.0.0.1

interval = 300 seconds

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **ip advertising** command:

EXAMPLE 1:

The following example enables IP advertising, specifying 10.1.1.1 as the destination and an interval of 240 seconds.

SCE(config)#**ip advertising destination 10.1.1.1 interval 240**
SCE(config)#

EXAMPLE 2:

The following example restores the IP advertising destination to the default value.

```
SCE(config)#default ip advertising destination
SCE(config)#
```

Related Commands

ip default-gateway

Configures the default gateway for the SCE Platform. Use the **no** form of this command to unset the SCE Platform default gateway.

ip default-gateway *x.x.x.x*

no ip default-gateway

Syntax Description

x.x.x.x	The IP address of the default gateway for the SCE Platform.

Defaults

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example sets the default gateway IP of the SCE Platform to 10.1.1.1.

```
SCE(config)#ip default-gateway 10.1.1.1
SCE(config)#
```

Related Commands

ip domain-lookup

Enables or disables the domain name lookups.

Use the **no** form of the command to disable the domain name lookup.

ip domain-lookup

no ip domain-lookup

Syntax Description

This command has no arguments or keywords.

Defaults

enabled

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

EXAMPLE 1:

The following example enables the domain lookup.

SCE(config)#**ip domain-lookup**
SCE(config)#

EXAMPLE 2:

The following example disables the domain lookup.

SCE(config)#**no ip domain-lookup**
SCE(config)#

Related Commands

ip domain-name

Defines a default domain name. Use the **no** parameter of this command to remove the current default domain name. When using the **no** parameter, you do not have to specify the domain name.

ip domain-name *domain-name*

no ip domain-name

Syntax Description

domain-name	The default domain name used to complete host names that do not specify a domain. Do not include the initial period that separates an unqualified name from the domain name.

Defaults

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **ip domain-name** command:

EXAMPLE 1:

The following example configures the domain name.

SCE(config)#**ip domain-name Cisco.com**
SCE(config)#

EXAMPLE 2:

The following example removes the configured domain name.

SCE(config)#**no ip domain-name**
SCE(config)#

Related Commands

ip ftp password

Specifies the password to be used for FTP connections for the current session. The system will use this password if no password is given in the copy FTP command.

ip ftp password *password*

Syntax Description

password	The password for FTP connections.

Defaults

Default password is **admin**

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example sets the password to be used in the FTP connection to mypw.

***SCE*#ip ftp password mypw**
***SCE*#**

Related Commands

ip ftp username

Configures the username for FTP connections for the current session. This username will be used if no username is given in the copy FTP command.

ip ftp username *user-name*

Syntax Description

user-name	The username for FTP connections.

Defaults

Default username is **anonymous**

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example sets myname as the username for FTP connections.

***SCE*#ip ftp username myname**
***SCE*#**

Related Commands

ip host

Adds a host name and address to the host table.

ip host *hostname ip-address*

Syntax Description		
	hostname	The host name to be added.
	ip-address	The host IP address in x.x.x.x format.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example adds a host to the host table.

SCE(config)#**ip host PC85 10.1.1.61**
SCE(config)#

Related Commands

no ip host (on page 2-103)

ip name-server

Specifies the address of 1–3 servers to use for name and address resolution. The system maintains a list of up to 3 name servers. If the current list is not empty, this command adds the specified servers to the list. The no option of this command removes specified servers from the current list.

ip name-server *server-address1* [*server-address2*] [*server-address3*]
no ip name-server

Syntax Description

server-address1 The IP address of the name server.

server-address2 The IP address of an additional name server.

server-address3 The IP address of an additional name server.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example adds the DNS 10.1.1.60 and 10.1.1.61 to the configured servers list.

SCE(config)#**ip name-server 10.1.1.60 10.1.1.61**
SCE(config)#

Related Commands

ip rmi-adapter

Enables or disables the RMI adapter. Use the **no** option of this command to disable the RMI adapter.

ip rmi-adapter

no ip rmi-adapter

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **ip rmi-adapter** command:

EXAMPLE 1:

The following example enables the RMI adapter.

SCE(config)#**ip rmi-adapter**

EXAMPLE 2:

The following example disables the RMI adapter.

SCE(config)#**no ip rmi-adapter**

Related Commands

ip rmi-adapter port

Defines the RMI adapter port.

Use the **default** option to reset the RMI adapter port assignment to the default port (1099). You do not need to specify the default port number.

ip rmi-adapter port *port-number*

default ip rmi-adapter port

Syntax Description

port-number The number of the port assigned to the RMI adapter

Defaults

Default port number is 1099.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **ip rmi-adapter port** command:

EXAMPLE 1:

The following example shows how to configure the RMI interface, specifying 1299 as the RMI adapter port.

SCE(config)#**ip rmi-adapter**
SCE(config)#**ip rmi-adapter port 1299**

EXAMPLE 2:

The following example shows how reset the RMI adapter port.

SCE(config)#**default ip rmi-adapter port**

Related Commands

ip route

Adds or removes an IP routing entry to the routing table. Use the **no** option to remove an IP routing entry from the routing table.

ip route *prefix mask* [*next-hop*]
no ip route *prefix mask* [*next-hop*]

Syntax Description

prefix	The new entry's prefix.
mask	The new entry's subnet mask.
next-hop	The new entry's next hop in the route.

Defaults

Command Modes

Global Configuration

Usage Guidelines

All addresses must be in dotted notation.

The next-hop must be within the Management FastEthernet Interface subnet.

Authorization: admin

Examples

The following examples illustrate the use of the **ip route** command:

EXAMPLE 1:

The following example sets the next-hop to 10.1.1.2 for IP addresses in the range 244.50.4.0 to 244.50.4.255.

SCE(config)#**ip route 244.50.4.0 255.255.255.0 10.1.1.2**
SCE(config)#

EXAMPLE 2:

The following example removes the entry added in the previous example.

SCE(config)#**no ip route 244.50.4.0 255.255.255.0**
SCE(config)#

Related Commands

no ip route all (on page 2-104)

ip rpc-adapter

Enables the RPC adapter. Use the **no** option of this command to disable the RPC adapter.

ip rpc-adapter

no ip rpc-adapter

Syntax Description

This command has no arguments or keywords

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **ip rpc-adapter** command:

EXAMPLE 1:

The following example enables the RPC adapter.

SCE(config)#**ip rpc-adapter**

EXAMPLE 2:

The following example disables the RPC adapter.

SCE(config)#**no ip rpc-adapter**

Related Commands

ip rpc-adapter port

Defines the RPC adapter port. Use the **default** option to reset the RPC adapter port assignment to the default port of 14374.

ip rpc-adapter port *port-number*

default ip rpc-adapter port

Syntax Description

port-number The number of the port assigned to the RPC adapter.

Defaults

The default port number is 14374

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **ip rpc-adapter port** command:

EXAMPLE 1:

The following example shows how to configure the RPC interface, specifying 1444 as the RPC adapter port.

SCE(config)#**ip rpc-adapter**
SCE(config)#**ip rpc-adapter port 1444**

EXAMPLE 2:

The following example shows how reset the RPC adapter port.

SCE(config)#**default ip rpc-adapter port**

Related Commands

ip ssh

Enables the SSH server.

Use the **no** option to disable the SSH server.

ip ssh

no ip ssh

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **ip ssh** command:

EXAMPLE 1:

The following example enables the SSH server.

SCE(config)#**ip ssh**
SCE(config)#

EXAMPLE 2:

The following example disables the SSH server.

SCE(config)#**no ip ssh**
SCE(config)#

Related Commands

ip ssh access-class

Assigns an access class list (ACL) to the SSH server, so that access to the SSH server is limited to the IP addresses defined in the ACL. (See ACLs.)

Use the **no** keyword to remove the ACL assignment from the SSH server.

ip ssh access-class *access-list-number*
no ip ssh access-class

Syntax Description

access-list-number	The access list number of an ACL

Defaults

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

EXAMPLE 1:

The following example assigns an existing ACL to the SSH server.

SCE(config)#**ip ssh access-class 4**
SCE(config)#

EXAMPLE 2:

The following example removes the ACL assignment from the SSH server.

SCE(config)#**no ip ssh access-class**
SCE(config)#

Related Commands

ip ssh key

Generates or removes the SSH key set.

ip ssh key [generate|remove]

Syntax Description

generate	generates a new SSH key set and saves it to non-volatile memory. Key size is always 2048 bits.
remove	removes the existing key set.

Defaults

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

EXAMPLE 1:

The following example generates a new SSH key set.

SCE(config)#**ip ssh key generate**
SCE(config)#

EXAMPLE 2:

The following example removes the SSH key set,

SCE(config)#**ip ssh key remove**
SCE(config)#

Related Commands

ip tunnel

Configures recognition of L2TP tunnels and skipping into the internal IP packet. User the **no** form of this command to disable tunnel recognition.

An IP tunnel is mutually exclusive with using VLAN for classification.

ip tunnel *mode*

no ip tunnel

Syntax Description

mode	The mode used for the L2TP tunnels.

Defaults

ip tunnel recognition is disabled

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example enables recognition of L2TP tunnels.

SCE(config if)#**ip tunnel L2TP skip**

Related Commands

show tunnel mode (on page 2-229)

L2TP identify-by

Configures the port number that the LNS and LAC use for L2TP tunnels. The default port number is 1701.

L2TP identify-by port-number *port-number*

Syntax Description

port-number The port number to be configured for L2TP tunnels.

Defaults

1701

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example identifies the L2TP port as being port# 1000.

SCE(config if)#**L2TP identify-by port-number <1000>**

Related Commands

line vty

Enters Line Configuration Mode for Telnet lines, configuring all Telnet lines.

line vty *start-number* [*end-number*]

Syntax Description

start-number	A number in the range 0-4. The actual number supplied does not matter. All telnet lines will be configured by this command.
end-number	A number in the range 0-4. The actual number supplied does not matter. All telnet lines will be configured by this command.

Defaults

Command Modes

Global Configuration

Usage Guidelines

The system prompt changes to reflect the Line Configuration mode. To return to Global Configuration Mode, type **exit**.

Authorization: admin

Examples

The following example enters the Line Configuration Mode for all lines.

SCE(config)#**line vty 0**
SCE(config-line)#

Related Commands

link failure-reflection

Enables/disables the link failure reflection.

link failure-reflection [**on-all-ports**]

no link failure-reflection

Syntax Description

on-all-ports	Enables reflection of a link failure to all ports

Defaults

Disabled

Command Modes

LineCard Interface Configuration

Usage Guidelines

Use the **on-all-ports** keyword to enable reflection of a link failure to all ports

Use the **no** form of this command to disable failure reflection (the **on-all-ports** keyword is not used in the **no** form of the command).

Authorization: admin

Examples

The following example enables the reflection of a link failure to all ports:

SCE(config if)#**link failure-reflection on-all-ports**
SCE(config if)#

Related Commands

link mode

Configures the link mode. The link mode allows the user to enforce the specified behavior on the link. This may be useful during installation and for debugging the network.

link mode *link mode*

Syntax Description

link	**Use this parameter for SCE 2000 platforms only** GBE: **GBE1-GBE2** **GBE3-GBE4** FE: **LINK1** **LINK2** **all-links**
mode	**Forwarding** **Bypass** **Cutoff** **Sniffing**

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Use the *link* parameter for the SCE 2000 4xGBE and the SCE 2000 4/8xFE platforms only. Since the SCE 1000 platform has only one link, it is not necessary to specify the link.

Use the 'all-links' keyword to configure the link mode for all links (SCE 2000 platforms only).

The 'sniffing' option can be configured only for all links (use the all-links' keyword).

Authorization: admin

Examples

The following examples illustrate the use of the link mode command:

EXAMPLE 1:

The following example configures "bypass" as the link mode on the first link for the SCE 2000 GBE platform.

SCE(config if)#**link mode GBE1-GBE2 bypass**

EXAMPLE 2:

The following example configures "forwarding" as the link mode for the SCE 1000 GBE platform.

SCE(config if)#**link mode forwarding**

EXAMPLE 3:

The following example configures "sniffing" as the link mode on all links for the SCE 2000 GBE platform.

SCE(config if)#**link mode all-links sniffing**

Related Commands

logger add-user-message

Adds a message string to the user log files.

logger add-user-message *message-text*

Syntax Description

message-text The message string you wish to add.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example adds "testing 123" as the message to the user log files:

***SCE*#Logger add-user-message “testing 123”**
***SCE*#**

Related Commands

logger device User-File-Log

Disables or enables the logger device.

logger device User-File-Log *status*

Syntax Description		
	status	**enabled** or **disabled**, indicating whether to turn on or off logging.

Defaults

enabled

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example disables the User-File-Log device.

SCE(config)#**logger device User-File-Log disabled**
SCE(config)#

Related Commands

logger device User-File-Log max-file-size

Sets the maximum log file size.

logger device User-File-Log max-file-size

Syntax Description

size	The maximum size for the user log (in bytes).

Defaults

1,000,000 bytes

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example configures the maximum size of the User-File-Log device to 65000 bytes.

SCE(config)#**logger device User-File-Log max-file-size 65000**
SCE(config)#

Related Commands

logger get support-file

Generates a log file for technical support. Note that this operation may take some time.

logger get support-file *filename*

Syntax Description

filename	Name of the generated log file.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example generates a log file named *tech_sup* for technical support.

***SCE*#logger get support-file tech_sup**
***SCE*#**

Related Commands

logger get user-log file-name

Outputs the current user log to a target file. The output file name can be a local path, full path, or full ftp path file name.

logger get user-log file-name *target-file*

Syntax Description

target-file	The log file name where the system will write the log file information.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example retrieves the current user log files.

***SCE*#logger get user-log file-name ftp://myname:mypw@10.1.1.205/d:/log.txt**
***SCE*#**

Related Commands

logout

Logs out of the Command-Line Interface of the SCE Platform.

Logout

Syntax Description	This command has no arguments or keywords

Defaults

This command has no default settings.

Command Modes

Exec

Usage Guidelines

Authorization: User

Examples

The following example shows how the user logs out (and confirms the logout).

SCE>**logout**
Are you sure? **Y**

Related Commands

management-agent system

Specifies a new package file to install for the management agent. The SCE Platform extracts the actual image file(s) from the specified package file only during the **copy running-config startup-config** command.

When using the **no** version of this command, you do not have to specify the package-file-name.

management-agent system *package-file-name*

no management-agent system

Syntax Description

Package file name	The name of a package file that contains the new management agent software. The filename should end with the .pkg extension.

Defaults

Command Modes

Global Configuration

Usage Guidelines

Use this command to upgrade the SCE Platform management agent. The package file is verified for the system and checked that it is not corrupted. The actual upgrade takes place only after executing the copy running-config startup-config command and rebooting the SCE Platform.

Authorization: admin

Examples

The following example upgrades the system with the *mng45.pkg* package.

SCE(config)#**management-agent system mng45.pkg**

Verifying package file…
Package file verified OK.

SCE(config)#exit
SCE#copy running-config startup-config

Backing –up configuration file…
Writing configuration file…
Extracting new management agent…

Extracted OK.

Related Commands

mkdir

Creates a new directory.

mkdir *directory-name*

Syntax Description

directory-name The name of the directory to be created.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example creates a new directory named mydir.

***SCE*#mkdir mydir**
***SCE*#**

Related Commands

more

Displays the contents of a file.

more *file-name*

Syntax Description

file-name	The name of the file to be displayed.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

The running-config option displays the running configuration file.

The startup-config option displays the startup configuration file.

Authorization: admin

Examples

The following partial sample output displays the content of some file.

***SCE*#more somefile.txt**
I am a happy little file.
***SCE*#**

Related Commands

show running-config (on page 2-210)

show startup-config (on page 2-223)

more user-log

Displays the user log on the CLI console screen.

more user-log

Syntax Description	This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example displays the user log on the CLI console screen.

***SCE*#more user-log**
<INFO> | 01/28/97 22:29:22 | CPU #000 | Logger: Task Initialized successfully

Related Commands

MPLS

Configures the MPLS environment.

MPLS [**VPN**|**Traffic-Engineering**] [**skip**]

Syntax Description

VPN	Labels are mandatory in the traffic.
Traffic-Engineering	Labels are not mandatory in the traffic.

Defaults

Traffic-Engineering

Command Modes

LineCard Interface Configuration

Usage Guidelines

Use the **VPN** keyword when the labels are mandatory in the traffic, otherwise use the **Traffic-Engineering** keyword.

Authorization: admin

Examples

The following example selects the VPN MPLS tunnel environment.

SCE(config if)#**mpls vpn skip**

Related Commands

no access-list

Removes an entire access list (together with all its entries).

`no access-list` *`number`*

Syntax Description

number	An access-list number (1–99).

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes access list 1.

SCE(config)#**no access-list 1**
SCE(config)#

Related Commands

access-list (on page 2-4)

no enable password

Resets the password for the specified authorization level to the default value. For the user level, this means that no password is required. For the admit and root levels, the password is restored to the default value (**pcube** or **cisco**).

no enable password [**level** *level*]

Syntax Description

level	User authorization level (0, 10, 15) as specified in in Login and User Levels, in table Authorization Levels. If no level is specified, the default is Admin (10).

Defaults

For the admin and root levels, the password is restored to the default value 'pcube'.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes the requirement for user level password.

SCE(config)#**no enable password level 0**
SCE(config)#

Related Commands

enable password (on page 2-52)

no ip access-class

Resets global access to the SCE Platform from any IP address.

no ip access-class

Syntax Description	This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example resets global access.

SCE(config)#**no ip access-class**
SCE(config)#

Related Commands

ip access-class (on page 2-64)

no ip host

Removes a host name and address from the host table.

no ip host *hostname* [*ip-address*]

Syntax Description

hostname	The host name to be removed. If you do not include an IP address, all mappings for the hostname are removed from the list.
ip-address	The host IP address. If the pair {hostname, IP-address} does not exist in the host table, the system returns no indication

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes a host name together with all of its IP mappings.

SCE(config)#**no ip host PC85**
SCE(config)#

Related Commands

ip host (on page 2-73)

no ip route all

Removes all IP routing entries from the routing table.

no ip route all

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes all IP routing entries from the routing table

SCE(config)#**no ip route all**
SCE(config)#

Related Commands

ip route (on page 2-77)

no RDR-formatter destination

Removes the mappings of an RDR formatter destination to categories. When all categories for a destination are removed, the entire destination is removed.

no RDR-formatter destination *ip-address* **port** *port-number* [category {name *category name* }| {number [*1-4*]}]

Syntax Description

ip-address	IP address of the destination.
port-number	The port number of the destination.
category	Use this parameter to remove a particular category from this destination. The category may be identified by either a user-defined name or number (1 to 4). If the category is specified, only the specified category is removed. If no category is specified, the entire destination is removed.

Defaults

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

EXAMPLE 1:

The following example removes an entire RDR formatter destination.

SCE(config)#**no RDR-formatter destination 10.1.1.206 port 34000**
SCE(config)#

EXAMPLE 2:

The following example removes only one category from the specified RDR formatter destination.

SCE(config)#**no RDR-formatter destination 10.1.1.206 port 34000 category name prepaid**
SCE(config)#

Related Commands

RDR-formatter destination (on page 2-124)

no RDR-formatter destination all (on page 2-107)

no RDR-formatter destination all

Removes all of the configured RDR-formatter peer connection for the list of possible destinations.

no RDR-formatter destination all

Syntax Description	This command has no arguments or keywords.
Defaults	This command has no default settings.
Command Modes	Global Configuration
Usage Guidelines	Authorization: admin
Examples	The following example removes all RDR formatter destinations. ***SCE***(config)#**no RDR-formatter destination all**
Related Commands	*RDR-formatter destination* (on page 2-124)

no snmp-server community all

Removes all configured communities.

no snmp-server community all

Syntax Description	This command has no arguments or keywords.

Defaults

This command had no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes all configured communities.

SCE(config)#**no snmp-server community all**
SCE(config)#

Related Commands

snmp-server community (on page 2-238)

no snmp-server host all

Removes all configured hosts.

no snmp-server host all

Syntax Description	This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes all configured hosts.

SCE(config)#**no snmp-server host all**
SCE(config)#

Related Commands

snmp-server host (on page 2-242)

no sntp server all

Disables all SNTP uni-cast servers.

no sntp server all

Syntax Description	This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example disables all SNTP uni-cast servers.

SCE(config)#**no sntp server all**
SCE(config)#

Related Commands

sntp server (on page 2-244)

no subscriber

Removes a specified subscriber from the system. Use the 'all' form to remove all introduced subscribers.

no subscriber name *subscriber-name*

no subscriber all

Syntax Description

subscriber-name	The specific subscriber name to be removed from the system.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes all subscriber.

SCE(config if)# **no subscriber all**
SCE(config if)#

Related Commands

no subscriber anonymous-group

Removes a specified anonymous subscriber group from the system. Use the 'all' form to remove all anonymous subscriber groups.

no subscriber anonymous-group name *group-name*
no subscriber anonymous-group all

Syntax Description

group-name The anonymous subscriber group to be removed from the system.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes all anonymous subscriber groups.

SCE(config if)# **no subscriber anonymous-group all**
SCE(config if)

Related Commands

no subscriber mappings included-in

Use this command to remove all existing subscriber mappings from a specified TIR or IP range.

no subscriber mappings included-in TP-IP-range name *TP-IP-range-name IP-range*

Syntax Description

TP-IP-range-name	Meaningful name assigned to this traffic processor IP range
IP-range	IP address and mask length defining the IP range

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example removes any existing subscriber mappings from the CTMS1 TIR.

SCE(config if)# **no subscriber mappings included-in TP-IP-range name CMTS1**

Related Commands

no timeout

Configures the Telnet server to work with no timeout. No matter how long there is no activity on the Telnet session, the system does not automatically disconnect the Telnet session.

no timeout

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Line Configuration Mode

Usage Guidelines

Authorization: admin

Examples

The following example disables the timeout.

SCE(config-line)#**no timeout**
SCE(config-line)#

Related Commands

timeout (on page 2-259)

no tos-marking diffserv

Disables the TOS marking.

no tos-marking diffserv

Syntax Description	This command has no arguments or keywords.
Defaults	Disabled
Command Modes	LineCard Interface Configuration
Usage Guidelines	Authorization: admin
Examples	The following example disables TOS marking. ***SCE***(config if)#**no tos-marking diffserv** ***SCE***(config if)#
Related Commands	*tos-marking mode* (on page 2-260)

ping

Pings the given host to test for connectivity. The ping program sends a test message (packet) to an address and then awaits a reply. Ping output can help you evaluate path-to-host reliability, delays over the path, and whether the host can be reached or is functioning.

ping *host*

Syntax Description

host	The host name or IP address of a remote station to ping.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example pings the host 10.1.1.201.

```
SCE#ping 10.1.1.201
pinging 10.1.1.201 ...
PING 10.1.1.201: 56 data bytes
64 bytes from host (10.1.1.201): icmp_seq=0. time=0. ms
64 bytes from host (10.1.1.201): icmp_seq=1. time=0. ms
64 bytes from host (10.1.1.201): icmp_seq=2. time=0. ms
64 bytes from host (10.1.1.201): icmp_seq=3. time=0. ms
----10.1.1.201 PING Statistics----
4 packets transmitted, 4 packets received, 0% packet loss
round-trip (ms)  min/avg/max = 0/0/0
SCE#
```

Related Commands

pqi install file

Installs the specified *pqi* file using the installation options specified (if any). This may take up to 5 minutes

pqi install file *filename* [*options options*]

Syntax Description

filename	The filename of the *pqi* application file to be installed.
options	The desired installation options. Use the **show pqi file** command to display the available installation options.

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example installs the Subscriber Manager anr10015.pqi file. No options are specified.

SCE (config if)#**pqi install file anr10015.pqi**

Related Commands

show pqi file (on page 2-201)

pqi rollback file

Reverses an upgrade of the specified *pqi* file. This may take up to 5 minutes

pqi rollback file *filename*

Syntax Description

filename	The filename of the *pqi* application file to be rolled-back. It must be the *pqi* file that was last upgraded.

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Always specify the last *pqi* file that was upgraded.

Authorization: admin

Examples

The following example reverses the upgrade for the Subscriber Manager using the anr100155.pqi file.

SCE (config if)#**pqi rollback file anr100155.pqi**

Related Commands

pqi uninstall file

Uninstalls the specified *pqi* file. This may take up to 5 minutes

pqi uninstall file *filename*

Syntax Description

filename	The filename of the *pqi* application file to be uninstalled. It must be the *pqi* file that was installed last.

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Always specify the last *pqi* file that was installed.

Always run the **pqi uninstall** command before installing a new pqi file to prevent accumulation of old files on the disk.

Authorization: admin

Examples

The following example uninstalls the Subscriber Manager anr10015.pqi file.

SCE(config if)#**pqi uninstall file anr10015.pqi**

Related Commands

pqi upgrade file

Upgrades the application using the specified *pqi* file and the upgrade options specified (if any). This may take up to 5 minutes

pqi upgrade file *filename* [*options options*]

Syntax Description

filename	The filename of the *pqi* application file to be used for the upgrade.
options	The desired upgrade options. Use the **`show pqi file`** command to display the available options.

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

A given *pqi* upgrade file is suitable for upgrading only from specific previously installed *pqi* files. The upgrade procedure checks that an upgrade is possible from the currently installed *pqi* file. The upgrade procedure will be stopped with an error message if the upgrade is not possible.

Authorization: admin

Examples

The following example upgrades the Subscriber Manager using the anr100155.pqi file. No options are specified.

SCE (config if)**#pqi upgrade file anr100155.pqi**

Related Commands

show pqi file (on page 2-201)

pwd

Displays the current working directory.

pwd

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the current working directory as tffs0.

***SCE*#pwd**
tffs0:
SCE#

Related Commands

queue

Sets the queue shaping.

queue *queue-number* **bandwidth** *bandwidth* **burst-size** *burstsize*

Syntax Description

queue-number	Queue-number from 1–4, where 4 is the highest priority (fastest). 1=BE, 2, 3=AF, and 4=EF. BE is the best effort queue, that is the lowest priority. EF is the Expedited Forwarding queue, that is the highest priority forwarding. The AF (Assured Forwarding) queues are middle-priority, with 3 being a higher priority queue, that is, packets from queue 3 are transferred faster than those in queue 2.
bandwidth	Bandwidth measured in kbps. 0 disables packet transmission from the queue. The maximum bandwidth is determined by the line rate. Bandwidth is set in resolutions of ~140Kbps, that is rounded to the nearest multiple of approximately 140 Kbps.
burstsize	Burst size in bytes, from 0–16000000.

Defaults

Bandwidth = 100000K (100 Mbps)

Burst size = 8000 (8K bytes)

Command Modes

FastEthernet Interface Configuration
GigabitEthernet Interface Configuration

Usage Guidelines

This command is valid for the FastEthernet and the GigabitEthernet line interfaces only.

Interface FastEthernet 0/#
Interface GigabitEthernet 0/#

Authorization: admin

Examples

The following sets queue shaping for queue 1.

SCE(config-if)#**queue 2 bandwidth 20000 burstsize 1000**
SCE(config-if)#

Related Commands

RDR-formatter category-number

Assigns a meaningful name to a category. This category name can then be used in any **rdr-formatter** command instead of the category number.

Use the **no** option of this command to disassociate the name from the category. The name will then not be recognized by any CLI commands.

RDR-formatter category-number [*1-4*] **name** *category name*

no RDR-formatter category-number [*1-4*] **name** *category name*

Syntax Description

category name The user-defined name to be assigned to the category.

Defaults

This command has no default settings.

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example assigns the name “prepaid” to Category 1.

SCE(config)#**RDR-formatter category-number 1 name prepaid**
SCE(config)#

Related Commands

RDR-formatter destination

Configures an RDR destination entry. Up to four entries can be configured. Each entry must have a different priority. The entry with the highest priority is used by the RDR formatter, provided that a connection with this destination can be established. This is where the RDR–formatter sends the events produced by the LineCard Interface.

RDR-formatter destination *ip-address* **port** *port-number* **[category** {**name** *category name* }| {**number** [*1-4]*}] [**priority** *priority-value*]

Syntax Description

ip-address	The destination IP address.
port-number	The destination port number.
category	(Optional) Use this parameter to assign a priority to a particular category for this destination.
category name	(Optional) User-defined name that identifies the category
number	(Optional) Use this parameter to identify the category by number (1 to 4).
priority-value	The priority of the destination. The priority value may be any number between 1 (lowest) to 100 (highest).

Defaults

Command Modes

Global Configuration

Usage Guidelines

The category may be identified by either name or number.
Assign a high priority to send RDRs from the specified category to this destination. Assign a low priority if RDRs from the specified category should not be sent to this destination.

For the first entry, if no priority is set, the highest priority is automatically assigned.
For all subsequent entries, the priority must be explicitly defined.
It is also possible to assign a different priority to each category for each destination. If no category is specified, the same priority is assigned to both categories for that destination.

Authorization: admin

Examples

The following examples illustrate the use of the **RDR-formatter destination** command:

EXAMPLE 1:

The following example configures an RDR-formatter destination with the default priority (highest) both categories.

SCE(config)#**RDR-formatter destination 10.1.1.205 port 33000**
SCE(config)#

EXAMPLE 2:

The following example configures an RDR-formatter destination with a different priority for each category. This configuration will send RDRs from category 2 to this destination, but not RDRs from category 1.

SCE(config)#**RDR-formatter destination 10.1.1.206 port 34000 category number 1 priority 10 category number 2 priority 90**
SCE(config)#

Related Commands

no RDR-formatter destination all (on page 2-107)

show RDR-formatter destination (on page 2-206)

RDR-formatter forwarding-mode

Defines the mode in which the RDR formatter will send the RDRs to the destinations.

RDR-formatter forwarding-mode *mode*

Syntax Description

mode	Settings: **`redundancy, multicast`** as described in the Valid Mode Settings table in the Usage Guidelines.

Defaults

mode is **`redundancy`**

Command Modes

Global Configuration

Usage Guidelines

Table 2-3 Valid Mode Settings

`redundancy`	All RDRs are sent only to the primary (active) connection.
`multicast`	All RDRs are sent to all destinations.

Authorization: admin

Examples

The following example sets the RDR formatter mode to "**redundancy**".

SCE(config)#**RDR-formatter forwarding-mode redundancy**
SCE(config)#

Related Commands

show RDR-formatter forwarding-mode (on page 2-208)

reload

Reboots the SCE Platform system.

reload

Warning In order not to lose the current configuration, use the **copy running-config-all startup-config-all** command before using the **reload** command.

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows backing up of the configuration and performing a system reboot.

***SCE*#copy running-config-all startup-config-all**
***SCE*#reload**
Are you sure? **Y**
The system is about to reboot, this will end your CLI session

Related Commands

reload shutdown

Shuts down the SCE Platform system, preparing it for being turned off.

reload shutdown

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use this command to shut down the SCE Platform system in an orderly manner, before turning it off. After issuing this command, the only way to revive the SCE Platform from its power-down state is to turn it off, then back on.

This command can only be issued from the serial CLI console port. When issued during a telnet CLI session, an error message is returned and the command is ignored. This is done to prevent the possibility of shutting it down from a remote location, from which it is not possible to power back up.

Authorization: admin

Examples

The following example shows the shutdown process.

***SCE*#reload shutdown**
You are about to shut down the system.
The only way to resume system operation after this
is to cycle the power off, and then back on.
Continue?

Y

IT IS NOW SAFE TO TURN THE POWER OFF.

Related Commands

rename

Changes the file name to the specified name.

rename *existing-file-name new-file-name*

Syntax Description

existing-file-name	The original name of the file.
new-file-name	The new name of the file.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example changes the name of file test1.pkg to test3.pkg.

***SCE*#rename test1.pkg test3.pkg**
***SCE*#**

Related Commands

rmdir

Removes an empty directory.

To remove a directory that is not empty, use the delete command with the recursive switch.

rmdir *directory-name*

Syntax Description

directory-name The name of the directory to be deleted.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

You can only remove an empty directory.

Authorization: admin

Examples

The following example deletes the code directory.

***SCE*#rmdir code**
***SCE*#**

Related Commands

scm apply file

Applies an scm configuration file.

scm apply file *file-name*

Syntax Description

file-name	Name of the file to be applied.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

scm configuration files are specific to the current application installed. Refer to the relevant application documentation for the definition of file format and content.

Authorization: admin

Examples

The following example applies a *scm* configuration file that disables TOS marking.

SCE (config if)**#scm apply file /tffs0/xmlFile.xml**
applying configuration ...
state ...
SCE (config if)#

Related Commands

script capture

Begins the recording of a script. It tracks all commands typed until the **script stop** command is used. Use this command to capture a sequence of repeated commands into a file for the purpose of executing the commands again. Use the **script stop** command to stop capturing the script.

script capture *script-file-name*

Syntax Description

script-file-name The name of the output file where the script is stored.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the script capture for the script1.txt.

***SCE*#script capture script1.txt**
***SCE*#cd log**
***SCE*#cd ..**
***SCE*#pwd**
***SCE*#script stop**

Related Commands

script stop (on page 2-135)

script print

Displays a script file.

script print *script-file-name*

Syntax Description

script-file-name The name of the file containing the script.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example prints the commands captured in script1.txt.

```
SCE#script print script1.txt
cd log
cd ..
pwd
script stop
SCE#
```

Related Commands

script capture (on page 2-132)

script run

Runs a script. The **halt** parameter causes the command to break script on errors.

script run *script-file-name* [**halt**]

Syntax Description

script-file-name The name of the file containing the script.

halt Stops the script running if one of the commands results in an error.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use this command to run a script that you have previously created using the **script capture** command.

Authorization: admin

Examples

The following example runs the script named script1.txt.

```
SCE#script run script1.txt
cd log
cd ..
pwd
tffs0:
script stop

SCE#
```

Related Commands

script capture (on page 2-132)

script stop

Stops script capture. Used in conjunction with the **script capture** command, it marks the end of a script being recorded.

script stop

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example stops the capturing of a script.

***SCE*#script capture script1.txt**
***SCE*#cd log**
***SCE*#cd ..**
***SCE*#pwd**
***SCE*#script stop**

***SCE*#**

Related Commands

script capture (on page 2-132)

[no] service password encryption

Enables password encryption, so that the password remains secret when the configuration file is displayed. Use the [**no**] form of this command to disable password encryption.

Default Disabled (no encryption)

Authorization admin

Mode Global Configuration

USAGE GUIDELINES

- Passwords that were configured in an encrypted format are not deciphered when password encryption is disabled.

EXAMPLE:

The following example shows the effect of enabling password encryption.

***SCE*#configure**

SCE(config)#**enable password abcd**

SCE(config)#**exit**

***SCE*#more running-config**

#This is a general configuration file (running-config).

#Created on 10:20:57 ISR TUE July 3 2001

…

enable password level 10 0 “abcd”

…

***SCE*#configure**

SCE(config)#**service password-encryption**

SCE(config)#**exit**

***SCE*#more running-config**

#This is a general configuration file (running-config).

#Created on 10:21:12 ISR TUE July 3 2001

…

service password-encryption

enable password level 10 5 “e2fc714c4727ee9395f324cd2e7f331f”

…

***SCE*#**

service RDR-formatter

Enables/disables the RDR-formatter. The RDR-formatter is the element that formats the reports of events produced by the LineCard and sends them to an external data collector.

Use the **no** keyword of this command to disable the RDR-formatter.

service RDR-formatter

no service RDR-formatter

This command has no arguments or keywords

Syntax Description

Defaults

Enabled

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **service RDR-formatter** command:

EXAMPLE 1:

The following example enables the RDR-formatter.

SCE(config)#service rdr-formatter
SCE(config)#

EXAMPLE 2:

The following example disables the RDR-formatter.

SCE(config)#**no service rdr-formatter**
SCE(config)#

Related Commands

service telnetd

Enables/disables Telnet daemon. Use the **no** form of this command to disable the daemon preventing new users from accessing the SCE Platform via Telnet.

service telnetd

no service telnetd

Syntax Description

This command has no arguments or keywords,

Defaults

Telnet daemon enabled

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **service telnetd** command:

EXAMPLE 1:

The following example enables the Telnet daemon.

SCE(config)#**service telnetd**
SCE(config)#

EXAMPLE 2:

The following example disables the Telnet daemon.

SCE(config)#**no service telnetd**
SCE(config)#

Related Commands

setup

Invokes the setup utility, which is a dialog, or series of questions, that guides the user through the basic configuration process. This utility runs automatically upon initial connection to the local terminal. The utility may also be invoked explicitly to make changes to the system configuration.

Following is a brief list of the parameters configured via the setup command:

- Host ID parameters: IP address, subnet mask, and hostname
- Passwords: admin password, password encryption

  The root password can be configured upon initial system configuration and when accessed from the root user.
- Time settings: time zone, offset from UTC, local time and date
- SNTP configuration: multicast client, unicast server, unicast query interval
- Domain Name Server configuration: default domain name and IP address (up to 3)
- RDR-formatter destination: IP address and TCP port number
- Access Control Lists: up to 100 lists, with 20 IP addresses in each list, each entry can be designated as permitted or denied.

  Create ACLs for IP access, Telnet access, SNMP GET community access, and SNMP SET community access as needed:
- SNMP configuration:

  Define the following:
  - GET community names (up to 20)
  - SET community names (up to 20)
  - trap managers (up to 20): IP address, community string, version
  - name of system manager
- Topology configuration:

  Define the following:
  - connection mode
  - administrative status after abnormal reboot
  - SCE 1000 Platform:
    - link-bypass mode when operational
    - redundancy
    - link-bypass mode when not operational
  - SCE 2000 Platform:
    - deployment type
    - physically-connected-link index
    - priority

- on-failure link behavior

For a complete description of the command, see the SCE Platform Installation and Configuration Guide.

setup

Syntax Description

The setup command does not include parameters in the usual sense of the word. However, the setup utility questions prompt for many global configuration parameters. Following is a table listing all parameters for which values may be requested by the setup dialog.

The table in the *Usage Guidelines* lists all the parameter values that are necessary to complete the initial configuration. It is recommended that you obtain all these values before beginning the setup.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Table 2-4 Setup Command Parameters

Parameter	Definition
IP address	IP address of the SCE Platform.
subnet mask	Subnet mask of the SCE Platform.
default gateway	Default gateway.
hostname	Character string used to identify the SCE Platform
admin password	Admin level password.
	Character string from 4-100 characters beginning with an alpha character.
root password	Root level password.
	Character string from 4-100 characters beginning with an alpha character.
password encryption status	Enable or disable password encryption?
Time Settings	
time zone name and offset	Standard time zone abbreviation and minutes offset from UTC.
local time and date	Current local time and date. Use the format:
	00:00:00 1 January 2002
SNTP Configuration	
broadcast client status	Set the status of the SNTP broadcast client.
	If enabled, the SCE will synchronize its local time with updates received from SNTP broadcast servers.
unicast query interval	Interval in seconds between unicast requests for update (64 – 1024)

Parameter	Definition
unicast server IP address	IP address of the SNTP unicast server.
DNS Configuration	
DNS lookup status	Enable or disable IP DNS-based hostname translation.
default domain name	Default domain name to be used for completing unqualified host names
IP address	IP address of domain name server. (maximum of 3 servers)
RDR Formatter Destination Configuration	
IP address	IP address of the RDR-formatter destination
TCP port number	TCP port number of the RDR-formatter destination
Access Control Lists	
Access Control List number	How many ACLs will be necessary? What IP addresses will be permitted/denied access for each management interface? You may want ACLs for the following: • Any IP access • Telnet access • SNMP GET access • SNMP SET access
list entries (maximum 20 per list)	IP address, and whether permitted or denied access.
IP access ACL	ID number of the ACL controlling IP access.
telnet ACL	ID number of the ACL controlling telnet access.
SNMP Configuration	
SNMP agent status	Enable or disable SNMP management.
GET community names	Community strings to allow GET access and associated ACLs (maximum 20).
SET community names	Community strings to allow SET access and associated ACLs (maximum 20).
trap managers (maximum 20)	Trap manager IP address, community string, and SNMP version.
Authentication Failure trap status	Sets the status of the Authentication Failure traps. (See Configuring Traps.)
enterprise traps status	Sets the status of the enterprise traps. (See Configuring Traps.)
system administrator	Name of the system administrator.
Topology Configuration (Both Platforms)	
connection mode	Is the SCE Platform installed in bump-in-the-wire topology (inline) or out of line using splitter or switch (receive-only)?
Admin status of the SCE Platform after abnormal boot	After a reboot due to a failure, should the SCE Platform remain in a Failure status or move to operational status provided no other problem was detected?
Topology Configuration (SCE 1000)	

Parameter	Definition
link bypass mode on operational status	When the SCE 1000 is operational, should it bypass trafific or not?
redundant SCE 1000 platform?	Is there a redundant SCE 1000 installed as a backup?
link bypass mode on non-operational status	When the SCE 1000 is not operational, should it bypass traffic or cut it off?
Topology Configuration (SCE 2000)	
type of deployment	Is this a cascade topology, with two SCE Platforms connected via the cascade ports? Or is this a single platform topology?
physically connected link (cascade topology only)	In a cascade deployment this parameter sets the index for the link that this SCE 2000 is deployed on. The options for the SCE 2000 are link-0 or link-1. In a single-SCE 2000 Platform deployment this parameter is not relevant since one SCE 2000 is deployed on both links. In this case the link connected to port1-port2 is by default link-0 and the link connected to port3-port4 is by default link-1.
priority (cascade topology only)	If this is a cascaded topology, is this SCE 2000 the primary or secondary SCE 2000?
on-failure behavior (inline connection mode only)	If this SCE 2000 is deployed inline, should the failure behavior be bypass or cutoff of the link?

Authorization: admin

Examples

The following example runs the setup utility.

***SCE*#setup**

```
        --- System Configuration Dialog ---

At any point you may enter a question mark '?' followed by 'Enter' for help.
Use ctrl-C to abort configuration dialog at any prompt.
Use ctrl-Z to jump to the end of the configuration dialog at any prompt.
Default settings are in square brackets '[]'.

Would you like to continue with the System Configuration Dialog? [yes/no]: y
```

Related Commands

show access-lists

Shows all access-lists or a specific access list.

show access-lists [*number*]

Syntax Description

number	Number of the access list to show

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example displays the configuration of access-list 1.

```
SCE#show access-lists 1
Standard IP access list 1
   Permit 10.1.1.0, wildcard bits 0.0.0.255
   deny   any

SCE#
```

Related Commands

access-list (on page 2-4)

show blink

Displays the blinking status of a slot. A slot blinks after it receives a blink command.

show blink slot *slot-number*

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the blink status of slot 0.

```
SCE#show blink slot 0
Slot 0 blink status: off

SCE#
```

Related Commands

blink (on page 2-17)

show calendar

Displays the time maintained by the real-time system calendar clock.

show calendar

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the current system calendar.

***SCE*#show calendar**
12:50:03 UTC MON November 13 2001

***SCE*#**

Related Commands

calendar set (on page 2-20)

show clock

Displays the time maintained by the system clock.

show clock

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the current system clock.

***SCE*#show clock**
12:50:03 UTC MON November 13 2001

***SCE*#**

Related Commands

clock set (on page 2-31)

show failure-recovery operation-mode

Displays the operation mode to apply after boot resulted from failure.

show failure-recovery operation-mode

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the **failure-recovery operation-mode** command to configure this.

Authorization: admin

Examples

The following example displays the failure recovery operation mode:

***SCE*#show failure-recovery operation-mode**
System Operation mode on failure recovery is: operational
***SCE*#**

Related Commands

failure-recovery operation-mode (on page 2-54)

show hostname

Displays the currently configured hostname.

show hostname

Syntax Description	This command has no arguments or keywords.

Defaults

Command Modes Privileged EXEC

Usage Guidelines

Authorization: admin

Examples The following example shows that ***SCE*** is the current hostname.

***SCE*#show hostname**
SCE

***SCE*#**

Related Commands *hostname* (on page 2-60)

show hosts

Displays the default domain name, the address of the name server, and the content of the host table.

show hosts

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the domain and hosts configured.

```
SCE#show hosts
Default domain is cisco.com
Name/address lookup uses domain service
Name servers are 10.1.1.60, 10.1.1.61
Host              Address
----              -------
PC85              10.1.1.61
SCE#
```

Related Commands

show interface FastEthernet

Displays the details of a FastEthernet Interface.

The **counters** keyword displays the values of counters of a line FastEthernet interface.

The **duplex** keyword displays the configured duplex mode and the actual status of it.

The **ip-address** keyword displays the currently configured IP address and subnet mask of the Management FastEthernet Interface.

The **speed** keyword displays the configured speed mode and the actual status of it.

The **queue** keyword displays the values of counters of a queue in a line FastEthernet interface.

show interface FastEthernet *slot-number/interface-number* [**counters** [*direction*]|**duplex**|**ip address**|**speed**|**queue** *queue-number*]

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

interface-number FastEthernet interface number 0, 1 - 4.

direction Optional direction specification, to show only counters of a specific direction. Use **`in`** or **`out.`**

queue-number Number of queue, in the range 0-3.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Enter a value of 0 for the interface number when using the **ip-address** keyword.

Enter a value of 1 - 4 n the *interface-number* parameter for line ports 1 - 4 to show information on the line interfaces for the **SCE 2000 4/8xFE** platform only.

Authorization: admin

Examples

The following examples illustrate the use of the **show interface FastEthernet** command:

EXAMPLE 1:

The following example shows the FastEthernet details.

***SCE*#show interface FastEthernet 0/0**
ip address: 10.1.6.145
subnet mask: 255.255.0.0
Configured speed: auto, configured duplex: auto
AutoNegotiation is On, link is Up, actual speed: 100, actual duplex: half
***SCE*#**
***SCE*#show interface FastEthernet 0/1**
Configured speed: auto, configured duplex: auto
AutoNegotiation is On, link is Up, actual speed: 100Mb/s, actual duplex: full
Bandwidth: 100000 Kbps, Burst-size: 5000 bytes
***SCE*#**

EXAMPLE 2:

The following example shows the FastEthernet interface counters.

***SCE*#show interface FastEthernet 0/1 counters**
In total octets: 191520
In good unicast packets: 560
In good multicast packets: 0
In good broadcast packets: 0
In packets discarded: 0
In packets with CRC/Alignment error: 0
In undersized packets: 0
In oversized packets: 0
Out total octets: 0
Out unicast packets: 0
Out non unicast packets: 0
Out packets discarded: 0
***SCE*#**

EXAMPLE 3:

The following example shows the FastEthernet interface duplex mode configuration and status.

***SCE*#show interface FastEthernet 0/1 duplex**
Configured duplex: auto
AutoNegotiation is On, link is Up, actual duplex: half
***SCE*#**

EXAMPLE 4:

The following example shows the configured IP address.

***SCE*#show interface FastEthernet 0/0 ip address**
Ip address: 10.1.5.120
Subnet mask: 225.255.0.0
***SCE*#**

EXAMPLE 5:

The following example shows the FastEthernet interface speed configuration and status.

```
SCE#show interface FastEthernet 0/1 speed
Configured speed: auto
AutoNegotiation is On, link is Up, actual speed: 100
SCE#
```

EXAMPLE 6:

The following example shows the FastEthernet interface queue number 3.

```
SCE#show interface FastEthernet 0/1 queue 3
Bandwidth: 100000 Kbps, Burst-size: 8000 bytes
SCE#
```

Related Commands

duplex (on page 2-50)

interface FastEthernet (on page 2-61)

ip address (on page 2-65)

queue (on page 2-122)

speed (on page 2-245)

show interface GigabitEthernet

Displays the details of a GigabitEthernet Interface.

show interface GigabitEthernet *slot-number/interface-number*

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

interface-number GigabitEthernet interface number 1 - 2, or 1 - 4.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Enter a value of 1 - 2 n the *interface-number* parameter for line ports 1 - 2 to show information on the line interfaces for the **SCE 1000 2xGBE** platform.

Enter a value of 1 - 4 n the *interface-number* parameter for line ports 1 - 4 to show information on the line interfaces for the **SCE 2000 4xGBE** platform.

Authorization: admin

Examples

The following example shows the GigabitEthernet details.

***SCE*#show interface GigabitEthernet0/1**

Related Commands

show interface LineCard

Displays information for a specific LineCard Interface.

show interface LineCard *slot-number*

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: user

Examples

The following example shows that the LineCard Interface does not currently have an application assigned to it.

```
SCE#show interface linecard 0
No application is assigned to slot 0
Silent is off
Shutdown is off

SCE#
```

Related Commands

interface LineCard (on page 2-63)

show interface LineCard application

Displays the name of the application assigned to the LineCard Interface.

show interface LineCard *slot-number* **application**

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the current application.

***SCE*#show interface LineCard 0 application**
/tffs0/app/apricot.sli

***SCE*#**

Related Commands

interface LineCard (on page 2-63)

show interface LineCard attack-detector

Displays the configuration of the specified attack detector.

show interface LineCard *slot-number* **attack-detector** *attack-detector* [**default**|**all**]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
attack-detector	The number of the specific attack detector to be displayed.
all	Displays the configuration of all existing attack detectors
default	Displays the default attack detector configuration.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the **all** keyword to display the configuration of all existing attack detectors.

Use the **default** keyword to display default attack detector configuration.

Authorization: admin

Examples

The following examples illustrate the **show interface LineCard attack-detector** command:

EXAMPLE 1:

The following example displays the configuration of attack detector number 3.

***SCE*#show interface LineCard 0 attack-detector 3**

EXAMPLE 2:

The following example displays the configuration of the default attack detectors.

***SCE*#show interface LineCard 0 attack-detector default**

EXAMPLE 3:

The following example displays the configuration of all existing attack detectors.

***SCE*#show interface LineCard 0 attack-detector all**

Related Commands

attack-detector (on page 2-8)

show interface LineCard attack-filter

Displays the attack filtering configuration.

show interface LineCard *slot-number* **attack-filter** [*option*]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
option	See Usage Guidelines for the list of options.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Following is a list of options that may be displayed:

- **query IP address configured**: displays the configured threshold values and action for the attack detector for a specified IP address
- **query IP address counters**: displays the current counters for the attack detector for all protocols and attack directions for a specified IP address
- **current-attacks**: displays all currently handled attacks
- **dont-filter**: displays all existing stopped attack filters
- **force-filter**: displays all existing forced attack filters

subscriber-notification ports: displays the list of subscriber-notification ports

Authorization: admin

Examples

The following examples illustrate the use of the **show interface LineCard attack-filter** command:

EXAMPLE 1:

The following example displays the configuration of the attack detector for a specified IP address.

***SCE*#show interface LineCard 0 attack-filter query IP address 10.10.10.10 configured**

EXAMPLE 2:

The following example displays all existing forced attack filters.

***SCE*#show interface LineCard 0 attack-filter force-filter**

EXAMPLE 3:

The following example displays the subscriber notification ports.

***SCE*#show interface LineCard 0 attack-filter subscriber-notification ports**

Related Commands

attack-filter ("attack-filter (LineCard Interface Configuration)" on page 2-11)

show interface LineCard connection-mode

Shows the LineCard Interface connection mode (inline or receive-only).

show interface LineCard *slot-number* **connection-mode**

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the LineCard connection mode configuration parameter value.

***SCE*#show interface LineCard 0 connection-mode**
inline

***SCE*#**

Related Commands

(SE2000)connection-mode ("connection-mode (SCE 2000 platform)" on page 2-40)

show interface LineCard counters

Displays the LineCard Interface hardware counters.

show interface LineCard *slot-number* **counters**

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the hardware counters for the LineCard Interface.

```
SCE#show interface linecard 0 counters
DP packets in: 100
DP packets out: 100
DP IP packets in: 90
DP Non-IP packets: 10
DP IP packets with CRC error: 0
DP IP packets with length error: 0
DP IP broadcast packets: 10
DP IP fragmented packets: 0
DP IP packets with TTL=0 error: 0
DP Non TCP/UDP packets: 10
DP TCP/UDP packets with CRC error: 0
FF counter #0: 0
FF counter #1: 0
FF counter #2: 0
FF counter #3: 0
...
```

Related Commands

show interface linecard link mode

Displays the configured LineCard Interface link mode.

show interface linecard *slot-number* **link mode**

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the configured link mode for the LineCard Interface.

***SCE*#show interface linecard 0 link mode**
***SCE*#**

Related Commands

link mode (on page 2-87)

show interface LineCard link-bypass (SCE 1000 only)

Displays the current LineCard link-bypass mode, as well as the configured modes for boot- time, normal operation, and failure.

show interface LineCard *slot-number* **link-bypass**

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the current and configured bypass modes.

```
SCE#show interface LineCard 0 link-bypass
Link-Bypass configuration according to status:
On-Boot       : Bypass
On-Operational: No-Bypass
On-Failure    : Bypass
Current bypass state is: No-Bypass
SCE#
```

Related Commands

show interface LineCard physically-connected-links (SCE 2000 only)

Displays the link mapping for the LineCard Interface.

show interface LineCard *slot-number* **physically-connected-links**

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the link mapping for the LineCard Interface.

***SCE*#show interface LineCard 0 physically-connected-links**
***SCE*#**

Related Commands

show interface LineCard silent

Displays the current LineCard Interface silent state. When the silent state is Off, the LineCard events reporting function is enabled.

show interface LineCard *slot-number* **silent**

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the LineCard Interface silent mode.

***SCE*#show interface LineCard 0 silent**
Off

***SCE*#**

Related Commands

silent (on page 2-236)

show interface LineCard subscriber

Displays subscribers meeting one of the following specified criteria:

- Having a value of a subscriber property that is equal to, larger than, or smaller than a specified value
- Having a subscriber name that matches a specific prefix
- Having a subscriber name that matches a specific suffix

Use the "amount" form to display the number of subscribers meeting the criteria rather than listing actual subscriber names.

show interface LineCard *slot-number* **subscriber** [amount] [**prefix** *prefix*] [**suffix** *suffix*] [**property** *propertyname* **equals**|**greater-than**|**less-than** *property-val*]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
prefix	The desired subscriber name prefix to match.
suffix	The desired subscriber name suffix to match.
propertyname	The name of the subscriber property to match.
property val	The value of the specified subscriber property. Specify whether to search for values equal to, greater than, or less than this value.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

Following is an example that lists the number of subscribers with the prefix 'gold' in the subscriber name.

***SCE*#show interface linecard 0 subscriber amount prefix gold**
***SCE*#**

Related Commands

show interface LineCard subscriber aging

Displays the subscriber aging for the specified type of subscriber (anonymous or introduced).

show interface LineCard *slot-number* **subscriber aging** [**anonymous**|**introduced**]

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following is an example of how to display the aging of introduced subscribers.

***SCE*#show interface linecard 0 subscriber aging introduced**
***SCE*#**

Related Commands

show interface LineCard subscriber anonymous

Displays the subscribers in a specified anonymous subscriber group. Use the "amount" form to display the number of subscribers in the group rather than a complete listing of members.

show interface LineCard *slot-number* **subscriber anonymous** [**amount**] [**name** *group-name*]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
group-name	The anonymous subscriber group.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

If no group-name is specified, all anonymous subscribers in all groups are displayed.

Authorization: admin

Examples

The following is an example of how to display the number of subscribers in the anonymous subscriber group anon1.

***SCE*#show interface linecard 0 subscriber anonymous amount name anon1**
***SCE*#**

Related Commands

show interface LineCard subscriber anonymous-group

Displays the configuration of the specified anonymous subscriber group. Use the “all” form with no group name to display all existing anonymous subscriber groups.

show interface LineCard *slot-number* **subscriber anonymous-group** [**name** *group-name*] [**all**]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
group-name	The anonymous subscriber group.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following is an example of how to display the anonymous subscriber groups.

***SCE*#show interface linecard 0 subscriber anonymous-group**
***SCE*#**

Related Commands

subscriber anonymous-group export csv-file (on page 2-248)

subscriber anonymous-group import csv-file (on page 2-249)

show interface LineCard subscriber db counters

Displays following subscriber database counters:

- Current number of subscribers
- Current number of introduced subscribers
- Current number of anonymous subscribers
- Current number of active subscribers (with active traffic sessions)
- Current number of subscribers with mappings
- Current number of IP mappings
- Current number of vlan mappings
- Max number of subscribers that can be introduced
- Max number of subscribers with mappings
- Max number of subscribers with mappings date / time
- Total aggregated number introduced
- Total number of aged subscribers
- Total number of pull events

Number of traffic sessions currently assigned to the default subscriber

show interface LineCard *slot-number* **subscriber db counters**

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows how to display the subscriber database counters:

***SCE*#show interface LineCard 0 subscriber db counters**
***SCE*#**

Related Commands

show interface LineCard subscriber mapping

Displays subscribers whose mapping meets one of the following specified criteria:

- Is within a specified range of IP addresses
- Intersects a specified IP range
- Matches a specified VLAN tag
- Has no mapping

Use the “amount” form to display the number of subscribers meeting the mapping criteria rather than listing actual subscriber names.

show interface LineCard *slot-number* **subscriber mapping** [**amount**] [**IP** *iprange*] [**intersecting IP** *iprange*] **[VLANid** *vlanid*] [**none**]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
iprange	Specified range of IP addresses.
vlanid	Specified VLAN tag.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following is an example that lists the number of subscribers with no mapping.

***SCE*#show interface linecard 0 subscriber mapping amount none**
***SCE*#**

Related Commands

show interface LineCard subscriber name

Displays information about a specified subscriber. The following information can be displayed:

- Mappings
- OS counters (bandwidth and current number of flows)
- All values of subscriber properties
- All of the above

If no category is specified, a complete listing of property values, mappings and counters is displayed.

show interface LineCard *slot-number* **subscriber name** *name* [**mappings**] [**counters**] [**properties**]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
name	The subscriber name.
mappings	Display subscriber mappings.
counters	Display OS counters.
properties	Display values of all subscriber properties.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following is an example of how to list the OS counters for the specified subscriber.

```
SCE#show interface linecard 0 subscriber name gold123 counters
SCE#
```

Related Commands

show interface LineCard subscriber properties

Displays all existing subscriber templates.

show interface LineCard *slot-number* **subscriber properties**

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following is an example of how to display the subscriber templates.

***SCE*#show interface linecard 0 subscriber templates**
***SCE*#**

Related Commands

show interface LineCard subscriber TP-mappings statistics

Displays the traffic processor mappings state.

show interface LineCard *slot-number* **subscriber TP-mappings statistics**

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following is an example of how to display the traffic processor mappings .

***SCE*#show interface linecard 0 subscriber TP-mappings statistics**
***SCE*#**

Related Commands

subscriber TP-mappings (on page 2-256)

show interface LineCard subscriber TP-IP-range

Displays the configuration of a specified TIR.

show interface LineCard *slot-number* **subscriber TP-IP-range** *TP-IP-range-name* [**all**]

Syntax Description

slot-number The number of the identified slot. Enter a value of 0.

TP-IP-range-name Name of the TIR to be displayed.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the **all** keyword to display all existing TIR configurations.

Authorization: admin

Examples

Following is an example of how to display all existing TIR configurations .

***SCE*#show interface linecard 0 subscriber TP-IP-range all**
***SCE*#**

Related Commands

subscriber TP-IP-range (on page 2-257)

show interface LineCard subscriber mapping included-in TP-IP-range

Displays the existing subscriber mappings for a specified TIR or IP range.

show interface LineCard *slot-number* **subscriber** [**amount**] **mapping included-in TP-IP-range** [*TP-IP-range-name* | *IP*]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
TP-IP-range-name	Name of the TIR for which mappings should be displayed.
IP	IP range for which mappings should be displayed.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the **amount** keyword to display the number of existing mappings only, rather than the mappings themselves.

Authorization: admin

Examples

The following examples illustrate the **show interface LineCard subscriber mapping included-in TP-IP-range** command:

EXAMPLE 1:

Following is an example of how to display all existing mappings for TIR CMTS1.

***SCE*#show interface linecard 0 subscriber mapping included-in TP-IP-range CMTS1**
SCE#

EXAMPLE 2:

Following is an example of how to display the number of existing mappings for TIR CMTS1.

***SCE*#show interface linecard 0 subscriber amount mapping included-in TP-IP-range CMTS1**
SCE#

Related Commands

subscriber TP-IP-range (on page 2-257)

show interface LineCard tos-marking mode

Displays the current LineCard TOS marking status.

show interface LineCard *slot-number* **tos-marking mode**

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows that the tos marking mode is enabled:

***SCE*#show interface LineCard 0 tos-marking mode**
ToS marking mode on slot 0 is enabled

***SCE*#**

Related Commands

tos-marking mode (on page 2-260)

show interface LineCard tos-marking table

Displays the current LineCard TOS marking table.

show interface LineCard *slot-number* **tos-marking table**

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the ToS marking table:

***SCE*#show interface LineCard 0 tos-marking table**

	BE	AF1	AF2	AF3	AF4	FE
green	0x0	0xa	0x12	0x1a	0x22	0x2e
yellow	0x0	0xc	0x14	0x1c	0x24	0x2e
red	0x0	0xe	0x16	0x1e	0x24	0x2e

***SCE*#**

Related Commands

tos-marking set-table-entry (on page 2-262)

show interface LineCard traffic-counter

Displays the specified traffic counter.

show interface linecard *slot-number* **traffic-counter** *name* [**all**]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.
name	Name of the traffic counter to be displayed.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the **all** keyword to display all traffic counters.

Authorization: admin

Examples

The following example displays information for all existing traffic counters.

***SCE*#show interface linecard 0 traffic-counter all**
Counter 'cnt' value: 0 packets. Rules using it: None.
Counter 'cnt2' value: 1284 packets. Rules using it: Rule2.
2 counters listed out of 32 available.

Related Commands

traffic-counter (on page 2-263)

show interface LineCard traffic-rule

Displays the specified traffic rule configuration.

show interface linecard *slot-number* **traffic-rule** *name* [**all**]

Syntax Description		
	slot-number	The number of the identified slot. Enter a value of 0.
	name	Name of the traffic rule to be displayed.

Defaults

Command Modes Privileged EXEC

Usage Guidelines Use the **all** keyword to display all traffic counter rules.

Authorization: admin

Examples The following example displays information for the Rule1 traffic rule.

***SCE*#show interface linecard 0 traffic-rule name Rule1**

Related Commands *traffic-rule* (on page 2-264)

show interface LineCard [MPLS|VLAN|L2TP|IP-tunnel]

Displays the tunnel configuration.

show interface LineCard *slot-number* [**MPLS**|**VLAN**|**L2TP**|**IP-tunnel**]

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the IP tunnel configuration.

```
SCE#show interface LineCard 0 ip-tunnel
tunnel mode: tunneling disable
SCE#
```

Related Commands

MPLS (on page 2-99)
L2TP identify-by (on page 2-84)
ip tunnel (on page 2-83)
VLAN (on page 2-268)

show interface LineCard vlan translation

Shows vlan translation configuration.

show interface LineCard *slot-number* **vlan translation**

Syntax Description

slot-number	The number of the identified slot. Enter a value of 0.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the vlan translation configuration.

***SCE*#show interface LineCard 0 vlan translation**
vlan translation constant: increment 16

***SCE*#**

Related Commands

vlan translation (on page 2-269)

show ip access-class

Shows the access list defined for global IP access to the SCE Platform system. Only IP addresses permitted access according to this access list are allowed access to the system.

show ip access-class

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the IP access class mapping.

***SCE*#show ip access-class**
IP layer is using access-list # 1.

***SCE*#**

Related Commands

ip access-class (on page 2-64)

show ip advertising

Shows the status of IP advertising, the configured destination and the configured interval.

Use the [destination] and [interval] versions of the command to display only the configured destination or interval, respectively.

show ip advertising [**destination**|**interval**]

Syntax Description

destination	Displays IP advertising destination.
interval	Displays the interval between ping commands

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Use the form **show ip advertising destination** to display the IP advertising destination.

Use the form **show ip advertising interval** to display the interval between ping commands.

Authorization: admin

Examples

The following example shows the IP advertising status and configuration.

***SCE*#show ip advertising**
IP advertising is disabled
IP advertising destination is 10.10.10.10
IP advertising interval is 853 seconds

Related Commands

ip advertising (on page 2-66)

show ip default-gateway

Shows configured default gateway.

show ip default-gateway

Syntax Description	This command has no arguments or keywords.
Defaults	
Command Modes	Privileged EXEC
Usage Guidelines	Authorization: admin
Examples	The following example displays the default gateway. ***SCE*#show ip default-gateway** Default gateway: 10.1.1.1 ***SCE*#**
Related Commands	*ip domain-lookup* (on page 2-69)

show ip rmi-adapter

Displays the status of the RMI adapter (enabled or disabled) and the configured port.

show ip rmi-adapter

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the configuration of the RMI adapter.

***SCE*#show ip rmi-adapter**
RMI server is ONLINE
RMI server port is 1099

Related Commands

ip rmi-adapter (on page 2-75)

show ip route

Shows the entire routing table and the destination of last resort (default-gateway). When using the *prefix* and *mask* parameters, it shows the routing entries from the subnet specified by the prefix and mask pair.

show ip route [*prefix mask*]

Syntax Description

prefix	The prefix of the routing entries to be included.
mask	Used to limit the search of routing entries.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the use of the **show ip route** command:

EXAMPLE 1:

The following example shows the default gateway.

```
SCE#show ip route
gateway of last resort is       10.1.1.1
SCE#
```

EXAMPLE 2:

The following example shows retrieval of the ip route.

```
SCE#show ip route 10.1.60.0 255.255.255.0
|    prefix      |     mask       |    next hop    |
|----------------|----------------|----------------|
|    10.1.60.0   |   255.255.255.0 |       10.1.1.5 |
SCE#
```

Related Commands

ip route (on page 2-77)

show ip rpc-adapter

Displays the status of the RPC adapter (enabled or disabled) and the configured port.

show ip rpc-adapter

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the configuration of the RPC adapter.

***SCE*#show ip rpc-adapter**
RPC Server is OFFLINE
RPC Server port is 14374

Related Commands

ip rpc-adapter (on page 2-78)

show ip ssh

Shows the status of the SSH sever, including current SSH sessions.

show ip ssh

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows how to retrieve the current SSH status.

***SCE*#show ip ssh**

Related Commands

ip ssh (on page 2-80)

show management-agent

Shows Management agent status: enabled/disabled and access-list number used.

show management-agent [*access-class*|*enabled*] [notifications [counters]]

Syntax Description

selected-info	Type **access-class** to view only access class status, or **enabled** to view only the enabled/disabled status.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following examples illustrate the **show management-agent** command:

EXAMPLE 1:

The following example shows the agent status.

***SCE*#show management-agent**
Management agent is enabled.
Agent is active
Management agent does not use any access-list.
SCE#

EXAMPLE 2:

The following example displays whether access lists are in use for the Management agent.

***SCE*#show management-agent access-class**
Management agent does not use any access-list.
SCE#

EXAMPLE 3:

The following example shows the Management agent is enabled.

```
SCE#show management-agent enabled
Management agent is enabled.
Agent is active
SCE#
```

Related Commands

management-agent system (on page 2-95)

show management-agent notifications

Displays the status of notifications sent to the Management agent.

show management-agent notifications

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example displays the default status for management agent notification.

***SCE*#show management-agent notifications**
Default status of all notifications is ON
***SCE*#**

Related Commands

management-agent system (on page 2-95)

show management-agent notifications counters

Displays counters of notifications sent to the Management agent, that is, the number of notifications that were sent and the number that were dropped.

show management-agent notifications counters

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example displays the counters for management agent notifications sent and dropped.

***SCE*#show management-agent notifications counters**
Number of notifications sent: 1320
Number of notifications dropped: 0
***SCE*#**

Related Commands

management-agent system (on page 2-95)

show line vty

Shows the access list configured to the Telnet server that contains the list of addresses that have access to the system.

show line vty timeout|access-class in

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the access list configured for telnet lines.

***SCE*#show line vty access-class in**
Telnet server is using access-list # 1.
***SCE*#**

Related Commands

line vty (on page 2-85)

show line vty timeout

Shows the timeout configured to the Telnet sessions.

show line vty timeout

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the timeout configured for the telnet session:

***SCE*#show line vty timeout**
Timeout is 30 minutes
***SCE*#**

Related Commands

line vty (on page 2-85)

show logger device User-File-Log

Displays the SCE Platform logger configuration status and maximum file size.

show logger device User-File-Log

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the SCE Platform logger User-File-Log status and configuration.

***SCE*#show logger device User-File-Log**
SCE User-File-Log status: Enabled
SCE User-File-Log file size: 64000
***SCE*#**

Related Commands

logger device User-File-Log (on page 2-90)

show logger device User-File-Log counters

Displays the SCE Platform logger counters.

show logger device User-File-Log counters

Syntax Description	This command has no arguments or keywords.
Defaults	
Command Modes	Privileged EXEC
Usage Guidelines	Authorization: admin

Examples

The following example shows the current SCE Platform User-File-Log counters.

```
SCE#show logger device user-file-log counters
Logger SCE User-File-Log counters:
Total info messages: 73
Total warning messages: 44
Total error messages: 0
Total fatal messages: 0
SCE#
```

Related Commands

logger device User-File-Log (on page 2-90)

show logger device User-File-Log max-file-size

Displays the SCE Platform logger maximum file size.

show logger device User-File-Log max-file-size

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the SCE Platform logger User-File-Log max file size configuration.

***SCE*#show logger device User-File-Log max-file-size**
SCE User-File-Log file size: 64000
SCE#

Related Commands

logger device User-File-Log max-file-size (on page 2-91)

show logger device User-File-Log status

Displays the SCE Platform logger configuration status.

show logger device User-File-Log status

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the SCE Platform logger User-File-Log status.

***SCE*#show logger device User-File-Log status**
SCE User-File-Log status: Enabled
SCE#

Related Commands

logger device User-File-Log (on page 2-90)

show logger nv-counters

Shows the non-volatile counters for the specified type of log file (user log or debug log).

show logger [**device** *device*] **nv-counters**

Syntax Description

device	The log device for which to display the counters (either **user-file-log** or **debug-file-log**.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the user log file non-volatile counters.

***SCE*#show logger device user-file-log nv-counters**
***SCE*#**

Related Commands

show pqi file

Displays information, such as installation options, about the specified application file.

show pqi file *filename* **info**

Syntax Description		
	filename	The filename of the desired application file.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows how to display application file information.

```
SCE#show pqi file myfile.txt info
application:   sm
description:   SCE 1000 sm
target SCE: SCE 1000
module names:  sm20001.pm0
```

Related Commands

pqi install file (on page 2-117)

show pqi last-installed

Displays the name of the last pqi file that was installed.

show pqi last-installed

Syntax Description	This command has no arguments or keywords.

Defaults

Command Modes Privileged EXEC

Usage Guidelines

Authorization: admin

Examples The following example shows how to display application file information.

```
SCE#show pqi last-installed
package name:   pack1
package date:   Tue Jun 10 17:27:55 GMT+00:00 2003
operation:      Upgrade
```

Related Commands *pqi install file* (on page 2-117)

show RDR-formatter

Displays the RDR formatter configuration.

show RDR-formatter

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the configuration of the RDR formatter.

```
SCE#show RDR-formatter
Status: enabled
Connection is: down
Forwarding mode: redundancy
Connection table:
-------------------------------------------------------------
Collector    | Port | Status  | Priority per Category:   |
IP Address / |      |         |--------------------------|
Host-Name    |      |         | Category1   | Category2  |
-------------------------------------------------------------
10.1.1.205   |33000 | Down    | 100         | 100        |
10.1.1.206   |33000 | Down    | 60          | 60         |
10.12.12.12  |33000 | Down    | 40          | 40         |
-------------------------------------------------------------
RDR:    read:        0 ,sent:        0, thrown:        0
UM:     read:        0 ,sent:        0, thrown:        0
Logger: read:        0 ,sent:        0, thrown:        0
Errors: thrown:      0
Last time these counters were cleared: 14:05:57 UTC SUN February 23 2003
SCE#
```

Related Commands

RDR-formatter destination (on page 2-124)

show RDR-formatter connection-status

Shows the current RDR formatter connection table and status (main connection status: up\down, forwarding mode, and connection/activity information for each destination).

show RDR-formatter connection-status

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the RDR-formatter connection status.

```
SCE#show RDR-formatter connection-status
Connection is: up
Forwarding mode: redundancy
Connection table:
-------------------------------------------------------------
Collector       | Port | Status  | Priority per Category:   |
IP Address   / |      |         |--------------------------|
Host-Name    |      |         | Category1   | Category2  |
-------------------------------------------------------------
10.1.1.205   |33000 | Up      | 100 primary | 100 primary|
10.1.1.206   |33000 | Down    | 60          | 60         |
10.12.12.12  |33000 | Up      | 40          | 40         |
-------------------------------------------------------------
SCE#
```

Related Commands

show RDR-formatter counters

Shows the RDR-formatter counters.

show RDR-formatter counters

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the RDR-formatter counters.

```
SCE#show RDR-formatter counters
RDR:    read:        0 ,sent:        0, thrown:        0
UM:     read:        0 ,sent:        0, thrown:        0
Logger: read:        0 ,sent:        0, thrown:        0
Errors: thrown:      0
Last time these counters were cleared: 14:05:57 UTC SUN February 23 2003
SCE#
```

Related Commands

show RDR-formatter destination

Shows the RDR-formatter destinations.

show RDR-formatter destination

Syntax Description	This command has no arguments or keywords.

Defaults

Command Modes Privileged EXEC

Usage Guidelines

Authorization: admin

Examples The following example shows the RDR-formatter configured destinations.

```
SCE#show RDR-formatter destination
Destination: 10.1.1.205
Port: 33000
Destination: 10.1.1.206
Port: 33000
Destination: 10.10.12.10
Port: 33000
SCE#
```

Related Commands *RDR-formatter destination* (on page 2-124)

show RDR-formatter enabled

Shows the RDR-formatter status (enabled/disabled).

show RDR-formatter enabled

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows that the RDR formatter is enabled.

***SCE*#show RDR-formatter enabled**
Status: enabled
SCE#

Related Commands

show RDR-formatter forwarding-mode

Shows the configured RDR-formatter forwarding-mode (redundancy/multicast).

show RDR-formatter forwarding-mode

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the RDR formatter forwarding-mode.

***SCE*#show RDR-formatter forwarding-mode**
Forwarding mode: redundancy
***SCE*#**

Related Commands

RDR-formatter forwarding-mode (on page 2-126)

show RDR-formatter statistics

Shows the current RDR formatter statistics.

show RDR-formatter statistics

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the current RDR statistics.

```
SCE#show RDR-formatter statistics
Total:
  sent:     0
  in-queue: 0
  thrown:   0
  rate:     0 RDRs per second
  max rate: 0 RDRs per second
Destination:   10.1.1.205  Port: 33000 Status: down  Active: no
   Sent:       0
   Rate:  0    Max:   0
Last connection establishment: 14:05:57  UTC  SUN  February  23
2003
Destination:    10.1.1.206  Port: 33000 Status: down  Active: no
   Sent:       0
   Rate:  0    Max:   0
Last connection establishment: 14:05:57  UTC  SUN  February  23
2003
Destination:   10.10.12.10  Port: 33000 Status: down  Active: no
   Sent:       0
   Rate:  0    Max:   0
Last connection establishment: 14:05:57  UTC  SUN  February  23
2003
SCE#
```

Related Commands

show running-config

Shows the current configuration.

show running-config [**all-data**]
more running-config [**all-data**]

Syntax Description

all data	Displays defaults as well as non-default settings.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

The **all data** switch may to see sample usage for many CLI configuration commands.

Authorization: admin

Examples

The following example shows the partial output of the **more running-config** command.

```
SCE#>more running-config all-data
#This is a general configuration file (running-config).
#Created on 16:48:11  UTC  WED  June  13  2001

cli-type 1
#version 1

service logger


no service password-encryption
enable password level 10 0 “pcube”
enable password level 15 0 “pcube”
service RDR-formatter
no RDR-formatter destination all
RDR-formatter history-size 0
clock timezone UTC 0
ip domain-lookup
no ip domain-name
no ip name-server
service telnetd


FastEthernet 0/0
ip address 10.1.5.120 255.255.0.0
speed auto
duplex auto


exit
ip default-gateway 10.1.1.1
no ip route all

line vty 0 4

no access-class in
timeout 30
exit
SCE#>
```

Related Commands

show scm last-applied

Displays the last scm configuration file that was applied.

show scm last-applied

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the last scm configuration file that was applied.

***SCE*#show scm last-applied**
/tffs0/xmlFile.xml

Related Commands

scm apply file (on page 2-131)

show snmp

Displays the SNMP configuration and counters.

show snmp

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the SNMP server configuration and status.

```
SCE#show snmp
SNMP server status: Enabled
Location: London_Office
Contact: Brenda
Authentication Trap Status: Enabled
Communities:
------------
Community: public,    Access Authorization: RO,     Access List
Index: 1
Trap managers:
------------
Trap host: 10.1.1.205,  community: public,  version: SNMPv2c
SNMP stats:
    29 SNMP packets input
     0 Bad SNMP version errors
    29 Unknown community name
     0 Illegal operation for community name supplied
     0 Encoding errors
     0 Number of requested variables
     0 Number of altered variables
     0 Get-request PDUs
     0 Get-next PDUs
     0 Set-request PDUs
    29 SNMP packets output
     0 Too big errors
     0 No such name errors
     0 Bad values errors
     0 General errors
     0 Response PDUs
    29 Trap PDUs
SCE#
```

Related Commands

show snmp community

Displays configured communities.

show snmp community

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the SNMP manager communities.

***SCE*#show snmp community**
Community: public, Access Authorization: RO, Access List Index: 1
***SCE*#**

Related Commands

snmp-server community (on page 2-238)

show snmp contact

Displays the configured MIB-2 variable sysContact.

show snmp contact

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the system contact.

***SCE*#show snmp contact**
Contact: Brenda@mycompany.com
***SCE*#**

Related Commands

snmp-server contact (on page 2-239)

show snmp enabled

Displays the SNMP agent status (enabled/disabled).

show snmp enabled

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the SNMP server enabled status.

***SCE*#show snmp enabled**
SNMP server status: Enabled
***SCE*#**

Related Commands

snmp-server (on page 2-237)

show snmp host

Displays the destination hosts for SNMP traps.

show snmp host

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the destination hosts for SNMP traps.

***SCE*#show snmp host**
Trap host: 10.1.1.205, community: public, version: SNMPv2c
***SCE*#**

Related Commands

snmp-server host (on page 2-242)

show snmp location

Displays the configured MIB-2 variable sysLocation.

show snmp location

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the system location.

***SCE*#show snmp location**
Location: London_Office
***SCE*#**

Related Commands

snmp-server location (on page 2-243)

show snmp MIB

Displays MIB variables.

show snmp MIB *mib variables*

Syntax Description		
	mib	Name of MIB to display. Only a value of **MIB-II** is supported.
	variables	Name of group to display. Use one of the following values: AT, ICMP, interfaces, IP, SNMP, system, TCP or UDP.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the MIB-2 system group.

***SCE*#show snmp MIB MIB-II system**
sysDescr.0 = CiSco Service Engineering, SW version: Control Card Version 1.30 build 29, HW version: ***SCE*** GE "RevE"
sysObjectID.0 = 1.3.6.1.4.1.5655.1.2
sysUpTime.0 = 14 hours, 25 minutes, 59 seconds
sysContact.0 = Brenda@mycompany.com
sysName.0 = ***SCE***
sysLocation.0 = London_Office
sysServices.0 = 2
SCE#

Related Commands

show snmp traps

Displays the SNMP traps generation status (enabled/disabled

show snmp traps

Syntax Description	This command has no arguments or keywords.

Defaults

Command Modes Privileged EXEC

Usage Guidelines

Authorization: admin

Examples The following example shows the SNMP server traps status.

***SCE*#show snmp traps**
Authentication Trap Status: Enabled
Enterprise Trap Status: Enabled
***SCE*#**

Related Commands *snmp-server enable traps* ("[no | default] snmp-server enable traps [snmp [snmp trap name]] [enterprise [enterprise trap name]]" on page 2-240)

show sntp

Displays the SNTP configuration and update statistics.

show sntp

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows statistics from the SNTP clients.

```
SCE#show sntp
SNTP broadcast client: disabled
last update time: not available

SNTP uni-cast client: enabled
there is one server:
1: 128.182.58.100
last update time: Feb 10 2002, 14:06:41
update interval: 100 seconds

SCE#
```

Related Commands

sntp server (on page 2-244)

show startup-config

Shows the startup configuration file. Use this command to review the configuration used by the SCE Platform at boot time in comparison with the current configuration to make sure that you approve of all the differences before saving the configuration by using **copy running-config startup-config** command.

show startup-config
more startup-config

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows a sample output.

***SCE*#more startup-config**
#Created on 20:17:46 UTC THU January 1 2001
#cli-type 1
#version 1
logger ***SCE*** User-File-Log max-file-size 20000
ip domain-name *pcube*
ip name-server 10.1.1.1
interface FastEthernet 0/0
ip address 10.1.4.202 255.0.0.0
interface LineCard 0
silent
***SCE*#**

Related Commands

copy running-config startup-config (on page 2-44)

show system operation-status

Displays the operation status of the system.

show system operation-status

This command has no arguments or keywords.

Syntax Description

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the system operation status:

***SCE*#show system operation-status**
System Operation status is Operational
***SCE*#**

Related Commands

show system-uptime

Displays the length of time the system has been running since the last reboot..

show system-uptime

Syntax Description	This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the system uptime for the SCE Platform.

***SCE*#show system-uptime**
SCE uptime is 21 minutes, 37 seconds
SCE#

Related Commands

show telnet sessions

Displays any active Telnet sessions.

show telnet sessions

Syntax Description	This command has no arguments or keywords.

Defaults

Command Modes Privileged EXEC

Usage Guidelines

Authorization: admin

Examples The following example shows that there is one active Telnet session.

***SCE*#show telnet sessions**

```
There is 1 active telnet session:

Index | Source
================
 0    | 10.1.1.201
SCE#
```

Related Commands *telnet* (on page 2-258)

show telnet status

Displays the status of the telnet server daemon.

show telnet status

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows that the telnet daemon is currently enabled.

***SCE*#show telnet status**
Telnet daemon is enabled.
***SCE*#**

Related Commands

show timezone

Displays the current time zone and daylight saving time configuration as configured by the user.

show timezone

Syntax Description	This command has no arguments or keywords.

Defaults

Command Modes Privileged EXEC

Usage Guidelines

Authorization: admin

Examples The following example shows the time zone configured by the user.

***SCE*#show timezone**
Time zone: ISR minutes offset from UTC: 120
***SCE*#**

Related Commands *clock timezone* (on page 2-36)

show tunnel mode

Displays the selected tunnel mode.

show tunnel mode

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the selected tunnel mode.

***SCE*#show tunnel mode**
tunnel mode: L2TP
***SCE*#**

Related Commands

ip tunnel (on page 2-83)

show version

Displays the configuration information for the system including the hardware version, the software version, the application used, and other configuration information.

show version

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the current version information of the SCE Platform.

```
SCE#show version
System version: Version 2.5.2 Build 240
Build time: Jan 11 2005, 07:34:47
Software version is: Version 2.5.2 Build 240
Hardware information is:
rx            : 0x0075
dp            : 0x1808
tx            : 0x1708
ff            : 0x0077
cls           : 0x1721
cpld          : 0x0025
Lic           : 0x0176
rev           : G001
Bootrom       : 2.1.0
L2 cache      : Samsung 0.5
lic type      : MFEoptic mode    :
Part number: 53AA-BXC1-AAAA
Revision: A02A
Software revision: G001
Serial number: 043P6982
Power Supply type: AC

SML Application information is:
Application file: /tffs0/temp.sli
Application name:
Application help:
Original source file:
H:\work\Emb\jrt\V2.5\sml\actions\drop\drop_basic_anyflow.san
Compilation date: Wed, September 22, 2004 at 21:25:21
Compiler version: SANc v2.50 Build 32 gcc_codelets=true built
on: Tue September 22 2004 09:51:57 AM.;SME plugin v1.1
Default capacity option used.

Logger status: Enabled

Platform: SCE 2000 - 4xFE
Management agent interface version: SCE Agent 2.5.1 Build 18
Software package file:
ftp://vk:vk@10.1.8.22/P:/EMB/LatestVersion/2.5.2/se1000.pkg

SCE2000 uptime is 21 minutes, 37 seconds
SCE#
```

Related Commands

show version all

Displays the complete version information as well as the running configuration for all components.

show version all

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows version and configuration information for all the system components.

```
SCE#show version all
System version: Version 2.5.2 Build 240
Build time: Jan 11 2005, 07:34:47
Software version is: Version 2.5.2 Build 240
Hardware information is:

rx            : 0x0075
dp            : 0x1808
tx            : 0x1708
ff            : 0x0077
cls           : 0x1721
cpld          : 0x0025
Lic           : 0x0176
rev           : G001
Bootrom       : 2.1.0
L2 cache      : Samsung 0.5
lic type      : MFE
optic mode    :
Part number: 53AA-BXC1-AAAA
Revision: A02A
Software revision: G001
Serial number: 043P6982
Power Supply type: AC

SML Application information is:
Application file: /tffs0/temp.sli
Application name:
Application help:
Original source file:
H:\work\Emb\jrt\V2.5\sml\actions\drop\drop_basic_anyflow.san
Compilation date: Wed, September 22, 2004 at 21:25:21
Compiler version: SANc v2.50 Build 32 gcc_codelets=true built
on: Tue September 22 2004 09:51:57 AM.;SME plugin v1.1
Default capacity option used.


Logger status: Enabled


Platform: SCE2000 - 4xFE
Management agent interface version: SCE Agent 2.5.1 Build 18
Software package file:
ftp://vk:vk@10.1.8.22/P:/EMB/LatestVersion/2.5.2/se1000.pkg


SCE2000 uptime is 21 minutes, 37 seconds
SCE#

.
```

```
Current configuration:
======================
#This is a general configuration file (running-config).
#Created on 10:14:59  UTC  TUE  January  11  2005

.

.


interface LineCard 0

connection-mode active
no silent
.
.

Software package file: Not available
Unified management package file: /tffs0/images/um13012.pkg
SCE#
```

Related Commands

show version software

Displays version information for the current software.

show version software

Syntax Description

This command has no arguments or keywords.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example shows the current software version.

***SCE*#show version software**
Software version is: Version 2.5.2 Build 240
SCE#

Related Commands

silent

Disables the LineCard from reporting events. Use the [no] form of this command if you want the LineCard to send reports.

silent
no silent

Syntax Description	This command has no arguments or keywords.

Defaults

No silent

Command Modes

LineCard Interface Configuration

Authorization: admin

Usage Guidelines

Examples

The following example changes the LineCard state to silent.

SCE(config if)#**`silent`**
SCE(config if)#

Related Commands

snmp-server

Enables the SNMP agent. You can use any of the other SNMP-server commands to enable the SNMP agent.

Use the **no** form to disable the SNMP agent from responding to SNMP managers. All SNMP settings are saved and are restored when the SNMP agent is re-enabled.

snmp-server enable
no snmp-server

Syntax Description

This command has no arguments or keywords

Defaults

disabled

Command Modes

Global Configuration

Usage Guidelines

You must define at least one community string in order to allow SNMP access. For complete information on community strings.

Authorization: admin

Examples

The following example disables the SNMP server.

SCE(config)#**no snmp-server**
SCE(config)#

Related Commands

snmp-server community (on page 2-238)

snmp-server community

Sets a community string.

The optional acl-number parameter states the access list number to restrict the managers that can use this community.

snmp-server community *community-string* [*read-option*] [*acl-number*]
no snmp-server community *community-string* [*read-option*] [*acl-number*]

Syntax Description

community-string	The SNMPv1 and SNMPv2c security string that identifies a community of managers that can access the SNMP server.
read-option	Legal values are **ro** and **rw**. The default **ro** (read-only) option allows managers to view MIB variables. **rw** sets the variable to read-write.
acl-number	Number of the access list that lists the managers who may access the SCE Platform via SNMP.

Defaults

no SNMP access

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example configures an SNMP managers community that has read-only permissions for the SCE Platform MIB. Only SNMP managers in access list 1 can access the SCE Platform.

SCE(config)#**snmp-server community public ro 1**
SCE(config)#

Related Commands

snmp-server contact

Sets the MIB-2 variable system contact. Use the **no** form of this command to remove the contact setting.

snmp-server contact *contact*

no snmp-server contact *contact*

Syntax Description

contact	A string that identifies the system contact.

Defaults

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example configures the system contact.

```
SCE(config)#snmp-server contact Brenda@MyCompany.com
SCE(config)#
```

Related Commands

snmp-server enable traps

Enables/disables SNMP traps (only authentication-failure traps and enterprise traps can be controlled using this command). Use the [**default**] form of this command to reset SNMP traps to the default status.

snmp-server enable traps [snmp [*snmp trap name***]] [enterprise [***enterprise trap name***]]**

no snmp-server enable traps [snmp [*snmp trap name***]] [enterprise [***enterprise trap name***]]**

default snmp-server enable traps [snmp [*snmp trap name***]] [enterprise [***enterprise trap name***]]**

Syntax Description

snmp trap name	Optional parameter used with the `snmp` parameter to control a specific snmp trap. Setting = **`Authentication`**
enterprise trap name	Optional parameter used with the `enterprise` parameter to control a specific enterprise trap. Settings = **`chassis, link-bypass, logger, operational-status, RDR-formatter, sntp, system-reset, telnet`**

Defaults

snmp traps: disabled
enterprise traps: enabled

Command Modes

Global Configuration

Usage Guidelines

There are two classes of SNMP traps that are controlled by this command:

- snmp traps
- enterprise traps

The options `snmp` and `enterprise` are parameters specifying the class of traps that are to be enabled/disabled by this command. Each class, or type, is composed of specific traps. Use these parameters as follows:

- To enable/disable all traps of one type: Specify only `snmp` or `enterprise`.
- To enable/disable only one specific trap: Specify `snmp` or `enterprise` with the additional *trap name* parameter naming the desired trap.
- To enable/disable all traps: Do not specify either `snmp` or `enterprise`.

Since, at this time, the only snmp type trap is the authentication trap, the `snmp` and `authentication` parameters are currently redundant.

Authorization: admin

Examples

The following example configures the SNMP server to send traps.

```
SCE(config)#snmp-server enable traps
SCE(config)#
```

Related Commands

snmp-server host

Sets destination hosts for SNMP traps.

snmp-server host *address* [**traps**] [**version** *version*] *community-string*

no snmp-server host *address* [**traps**] [**version** *version*] *community-string*

Syntax Description

address	The IP address of the SNMP server host.
traps	Optional switch, does not influence command functionality.
version	Version of the SCE Platform software running in the system. Can be set to 1 or 2c.
community-string	The SNMPv1 and SNMPv2c security string that identifies a community of managers that are able to access the SNMP server.

Defaults

No hosts

Command Modes

Global Configuration

Usage Guidelines

If no communities are specified by the **snmp-server community** command, the community string specified by this command is used by the SCE Platform, as if an **snmp-server community community-string ro** was given.

Authorization: admin

Examples

The following example adds a host destination for SNMP traps.

SCE(config)#**snmp-server host 10.1.1.205 version 2c public**
SCE(config)#

Related Commands

no snmp-server host all (on page 2-109)

snmp-server location

Gives a name to the SCE Platform location, setting the MIB-2 variable sysLocation. Use the **no** form of this command to remove the location setting.

snmp-server location *location*

no snmp-server location

Syntax Description

location	A string that specifies the system location.

Defaults

no location

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example configures the system location.

SCE(config)#**snmp-server location London_Office**
SCE(config)#

Related Commands

sntp server

Enables the SNTP uni-cast client to query the specified SNTP server. Use the **no** form of this command to disable the SNTP uni-cast server.

sntp server {*address*|*hostname*}
no sntp server

Syntax Description		
	address	The IP address of the SNTP server.
	hostname	The hostname of the SNTP server.

Defaults

SNTP uni-cast server is disabled

Command Modes

Global Configuration

Usage Guidelines

Authorization: admin

Examples

The following example enables an SNTP server at a specified IP address.

SCE(config)#**sntp server 128.182.58.100**
SCE(config)#

Related Commands

no sntp server all (on page 2-110)

[no] sntp broadcast client

Enables the SNTP multicast client to accept SNTP broadcasts from any SNTP server. Use the [**no**] form of this command to disable the SNTP multicast client.

Default disabled

Authorization admin

Mode Global Configuration

EXAMPLE:

The following example enables the SNTP multicast client.

SCE(config)#**sntp broadcast client**

SCE(config)#

sntp update-interval interval

Defines the interval (in seconds) between SNTP uni-cast update queries.

Default 900

Authorization admin

Mode Global Configuration

PARAMETERS

interval The interval between queries in seconds.

EXAMPLE:

The following example sets the SNTP update interval for 100 seconds.

SCE(config)# **sntp update-interval 100**

SCE(config)#

speed

Configures the speed of the FastEthernet Interface to either 10 Mbps or 100 Mbps. Auto means auto-negotiation (do not force speed on the link).

speed *speed*
no speed

Syntax Description		
	speed	The speed in Mbps or auto-negotiation. Can be set to **10**, **100** or **auto**.

Defaults

Auto

FastEthernet Interface Configuration

Command Modes

Usage Guidelines

Changing this configuration takes effect only if the **duplex** mode is not configured to **auto**.

Authorization: admin

Examples

The following example configures a FastEthernet port to 100 Mbps speed.

SCE(config if)#**speed 100**
SCE(config if)#

Related Commands

subscriber aging

Enables/disables subscriber aging for the specified type of subscribers (anonymous or introduced).

The aging period may also be defined when aging is enabled.

subscriber aging anonymous|introduced [timeout *aging-time*]
no subscriber aging anonymous|introduced

Syntax Description

aging-time	In minutes.
anonymous	Anonymous groups subscribers
introduced	Introduced subscribers

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

The most common usage for aging is for anonymous subscribers, since this is the easiest way to ensure that anonymous subscribers that have logged-out of the network are removed from the SCE Platform and are no longer occupying resources. Aging time can be configured individually for introduced subscribers and for anonymous subscribers.

Authorization: admin

Examples

The following example enables subscriber aging for anonymous subscribers with a timeout period of 10 minutes.

SCE(config if)#**subscriber aging anonymous timeout 10**
SCE(config if)#

Related Commands

subscriber anonymous-group export csv-file

Exports anonymous groups to the specified csv file.

subscriber anonymous-group export csv-file *filename*

Syntax Description

filename	Name of the csv file to which the anonymous groups information is to be exported.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example exports anonymous groups information to the specified file

SCE(config if)# **subscriber anonymous-group export csv-file s_g_0507.csv**
SCE(config if)#

Related Commands

subscriber anonymous-group import csv-file

Creates anonymous groups by importing anonymous subscribers from the specified csv file.

subscriber anonymous-group import csv-file *filename*

Syntax Description

filename	Name of the *csv* file containing the anonymous groups information.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Anonymous Group *csv* files have a fixed format. All lines have the same structure, as described below:

Anonymous-group-name, IP-range [, subscriber-template-number].

If no subscriber-template-number is specified, then the anonymous subscribers of that group will use the default template (#0), which cannot be changed by template import operations.

Following is an example of an anonymous group *csv* file:

```
group1, 10.1.0.0/16, 2
group2, 176.23.34.0/24, 3
group3, 10.2.0.0/16
```

Authorization: admin

Examples

The following example imports subscriber from the file *subscribers_groups.csv*.

SCE(config if)# **subscriber anonymous-group import csv-file subscribers_groups.csv**
SCE(config if)#

Related Commands

subscriber export csv-file

Exports subscribers to the specified csv file. Subscriber csv files are application-specific. Refer to the relevant application documentation for the definition of the file format.

subscriber export csv-file *filename*

Syntax Description

filename	Name of the *csv* file to which the subscriber information is to be exported.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Subscriber *csv* files are application-specific. Refer to the relevant application documentation for the definition of the file format.

Authorization: admin

Examples

The following example exports subscribers to the specified file.

SCE(config if)# **subscriber export csv-file gold_subscribers_04072003.csv**
SCE(config if)#

Related Commands

subscriber import csv-file

Imports subscribers from the specified csv file.

subscriber import csv-file *filename*

Syntax Description

filename	Name of the *csv* file containing the subscriber information.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Subscriber *csv* files are application-specific. Refer to the relevant application documentation for the definition of the file format.

Authorization: admin

Examples

The following example imports subscriber from the file *gold_subscribers.csv*.

SCE(config if)# **subscriber import csv-file gold_subscribers.csv**
SCE(config if)#

Related Commands

subscriber sm-connection-failure (SCE 2000 only)

Configures the behavior of the system in case of communication failure between the SM and the SCE platform.

subscriber sm-connection-failure action force-failure

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

If SM functionality is critical to the operation of the system: configure forced failure of the SCE Platform in the event of any loss of connection with the SM.

If SM functionality is not critical to the operation of the system: no action needs to be configured.

Authorization: admin

Examples

The following example configures forced failure of the SCE Platform in case of failure of the SM.

SCE (config if)#**subscriber sm-connection-failure action force-failure**
SCE (config if)#

Related Commands

subscriber template export csv-file

Exports a subscriber template to the specified csv file, according to the party template.

subscriber template export csv-file *filename*

Syntax Description

filename	Name of the *csv* file to which the subscriber template is to be exported.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example exports the subscriber template to the specified file.

```
SCE(config if)# subscriber template export csv-file gold0507.csv
SCE(config if)#
```

Related Commands

subscriber template import csv-file

Imports a subscriber template from the specified csv file, creating a party template.

subscriber template import csv-file *filename*

Syntax Description

filename	Name of the *csv* file containing the subscriber template.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example imports the subscriber template from the file *gold0507.csv*.

SCE(config if)# **subscriber template import csv-file gold0507.csv**
SCE(config if)#

Related Commands

subscriber TP-IP-range name IP-range target-TP

Use this command to create or update a TIR. Use the no form of this command to delete a specified TIR.

subscriber TP-IP-range name *TP-IP-range-name* **IP-range target-TP** *IP-range target-TP*

no subscriber TP-IP-range name IP-range target-TP *all*

Syntax Description

TP-IP-range name	Meaningful name assigned to this traffic processor IP range
IP-range	IP address and mask length defining the IP range
target-TP	number of the traffic processor to which this TIR is to be assigned

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Use the **remove-subscriber-mappings** keyword when editing or deleting a TIR to remove any existing subscriber mappings. If mappings exist, and this keyword is not used, the command will not execute.

- When deleting a TIR, only the range name is required.
- To delete all existing TIRs, use the [no] form of the command with the **all** keyword instead of the range name.

Authorization: admin

Examples

The following example creates a TIR named CMTS1 and assigns it to traffic processor# 5. The **remove-subscriber-mappings** keyword is used to remove any existing subscriber mappings.

SCE(config if)#**subscriber TP-IP-range name CMTS1 IP-range 10.10.10.0/128 target-TP 5 remove-subscriber-mappings**

Related Commands

subscriber TP-mappings

Reserves a specified number of subscriber rules for TIRs.

subscriber TP-mappings *max-TP-IP-ranges*

default subscriber TP-mappings

Syntax Description

max-TP-IP-ranges	Number of rules to allocate for TIRs

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

The maximum number of allowed reserved rules is 4096.

- By default 0 (zero) rules are reserved for TIRs.
- Updating this configuration is a major system event and can only be performed when no subscriber mappings or TIRs are configured.

Use the [default] version of this command to restore default subscriber rule allocation.

Authorization: admin

Examples

The following example reserves 500 subscriber rules for TIRs.

SCE(config if)#**subscriber TP-mappings max-TP-IP-ranges 500**

Related Commands

subscriber TP-IP-range

Use this command to import TIR definitions from a *csv* file and to export TIR definitions to a *csv* file.

subscriber TP-IP-range {**import | export**} **csv-file** *filename*

Following is the format of the *csv* file:

range name, ip-address/mask-length, target-TP

Syntax Description

csv-filename	*csv* file to be imported or exported to
import	Import from the specified csv file.
export	Export to the specified csv file.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Use the **remove-subscriber-mappings** keyword when importing TIR definitions to remove any existing subscriber mappings for specified IP ranges. If mappings exist, and this keyword is not used, the import command will not execute.

The **remove-subscriber-mappings** keyword is not applicable when exporting to a *csv* file.

Authorization: admin

Examples

The following example imports TIR information from the csv file *TIR_definitions*. The remove-subscriber-mappings keyword is used to remove any subscriber mappings that currently exist in the system on any of the IP ranges specified in the file.

SCE(config if)#**subscriber TP-IP-range import csv-file TIR_definitions remove-subscriber-mappings**

Related Commands

telnet

Starts a Telnet session.

telnet *address* [*ports*]

Syntax Description

address	Telnet access address.
ports	Optional port number. Default is 23.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example starts a telnet session:

***SCE*#telnet 10.1.5.120**
connecting to 10.1.5.120:23...

Related Commands

timeout

Configures the timeout for the Telnet session when the Telnet session is idle. After this time, the Telnet session is disconnected.

timeout *time*

Syntax Description

time	Timeout length in minutes.

Defaults

time = 30 minutes

Command Modes

Line Configuration Mode

Usage Guidelines

Authorization: admin

Examples

The following example sets the timeout to 45 minutes.

```
SCE(config-line)#timeout 45
SCE(config-line)#
```

Related Commands

no timeout (on page 2-114)

tos-marking mode

Enables TOS marking. The SCE Platform can mark the IP ToS field of transmitted packets, according to the Diffserv scheme standard code points.

The platform supports the association of services to the following Diffserv classes: BE (Best effort), EF (Expedited forwarding), AF1, AF2, AF3 and AF4 (Assured forwarding 1-4, respectively). When packets exceed the bandwidth limit they are configured with, they are internally marked in RED color and dropped by the SCE Platform itself. Packets that are below their limit are marked with either green or yellow drop precedence depending on their actual relative rate.

Note When TOS marking is enabled, the first few TCP packets are associated and marked with a default AF4 class that is mapped to the IQ2 queue. This occurs because the SCE Platform transmits the first few packets before classifying the flow and identifying the application or service

tos-marking mode *mode*

Syntax Description

mode	Mode for TOS marking. Currently the system supports only **`diffserv`**.

Defaults

Disabled

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example enables TOS marking:

SCE(config if)#**tos-marking mode diffserv**
SCE(config if)#

Related Commands

no tos-marking diffserv (on page 2-115)

tos-marking reset-table

Resets TOS settings to the Diffserv defaults.

tos-marking reset-table

Syntax Description

This command has no arguments or keywords.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example resets the TOS marking.

SCE(config if)#**tos-marking reset-table**
SCE(config if)#

Related Commands

tos-marking set-table-entry (on page 2-262)

tos-marking set-table-entry

The SCE Platform supports configuration via CLI of the mapping between the class and coloring and the exposed DSCP (Diffserv Code Points) values. The default of this table is direct mapping of the Diffserv standard code points.

The TOS table reads the class and color of the packet being transmitted, and assigns the value set in the table according to the color and class.

tos-marking set-table-entry class *class* **color** *color* **value** *value*

Syntax Description

class	Internal class of service assigned to the packet. Legal values are **BE**, **AF1**, **AF2**, **AF3**, **AF4** and **EF**.
color	Internal color assigned to the packet. Legal values are **green**, **yellow**, **red** and **any**.
value	Value of the TOS marking, assigned to the packet IP header, as transmitted by the SCE Platform. This is a 6-bit value, expressed as a hex number in the range **0x0** to **0x3f**.

Defaults

Diffserv defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example sets a TOS marking table entry.

SCE(config if)# **tos-marking set-table-entry class AF4 color yellow value 0x24**
SCE(config if)#

Related Commands

traffic-counter

Defines a new traffic counter. Use the no form of the command to delete an existing traffic counter.

traffic-counter name *name* {**count-bytes** | **count-packets** | **all**}

no traffic-counter

Syntax Description

name	name to be assigned to this traffic counter.

Defaults

This command has no default settings.

Command Modes

LineCard Interface Configuration

Usage Guidelines

The following are usage guidelines for the **traffic-counter** command:

- Use the **count-bytes** keyword to enable counting the bytes in each packet.

  The counter will increment by the number of bytes in each packet.
- Use the **count-packets** keyword to enable counting whole packets.

  The counter will increment by one for each packet.

Use the **all** keyword with the no form to delete all existing traffic counters.

Authorization: admin

Examples

The following are examples of the **traffic-counter** command:

EXAMPLE 1:

Following is an example of creating a traffic counter that will count bytes.

SCE`(config if)#` **traffic-counter name counter1 count-bytes**

EXAMPLE 2:

The following example demonstrates how to delete all traffic counters.

SCE`(config if)#` **no traffic-counter all**

Related Commands

traffic-rule

Defines a new traffic rule. Use the no form of the command to delete an existing traffic rule.

traffic-rule *name* **IP addresses** *IP-addresses* **protocol** *protocol* **ports** *ports* **flags** *flags* **direction** *direction* **traffic-counter** *traffic-counter* **action** *action*

no traffic-rule

Syntax Description

name	name to be assigned to this traffic rule.
IP-addresses	subscriber-side and network-side <IP specification>
protocol	Any one of the following protocols: *TCP/UCP/ICMP/IGRP/EIGRP/IS-IS/OSPF/Other*
ports	subscriber-side and network-side <port specification>
flags	TCP <flags specification>
direction	upstream/downstream/all
traffic-counter	name of traffic counter/none
action	*block* | *ignore*

Defaults

Command Modes

LineCard Interface Configuration

Usage Guidelines

The following are the usage guidelines for the **traffic-rule** command:

IP specification:

all|([all-but] (<ip-address>|<ip-range>))

- <ip-address> is a single IP address in dotted-decimal notation, such as 10.1.2.3
- <ip-range> is an IP subnet range, in the dotted-decimal notation followed by the number of significant bits, such as 10.1.2.0/24.

port specification (TCP/UDP only):

all|([all-but] (<port>|<port-range>))

- *<port>* is a single port number (0-65535)
- *<port-range>* is a port range in the following notation: <min-port>:<max-port>, such as 80:82.

<**flags specification**> (TCP only):

Defines criteria for matching packets based on the TCP flag values.

all | (SYN (0|1|all) [FIN (0|1|all) [RST (0|1|all) [ACK (0|1|all) [URG (0|1|all) [PSH (0|1|all)]]]]])

For each flag a value of 0, 1, or 'all' can be selected. Default is "all".

traffic-counter:

Either of the following:

- *Name of an existing traffic counter:* Packets meeting the criteria of the rule are to be counted in the specified counter. If a counter name is defined, the "count" action is also defined implicitly.
- *none:* If **none** is specified, then an action must be explicitly defined via the **action** option.

- Use the **all** keyword with the no form to delete all existing traffic rules.

Authorization: admin

Examples

The following are examples of the traffic-rule command:

EXAMPLE 1:

This example creates the following traffic rule:

Name = rule2

IP addresses: subscriber side = all IP addresses, network side = all IP addresses EXCEPT the subnet 10.10.10.0/24

Protocol = TCP

Ports: subscriber side = 100, network side = 100-150

Flags = RST flag when value = 1 and all ACK flag values

Direction = downstream

Traffic counter = counter2

Action = Block

The actions performed will be counting and blocking

SCE (config if)# **traffic-rule rule2 IP-addresses subscriber-side all network-side all-but 10.10.10.0/24 protocol TCP ports subscriber-side 100 network-side 100:150 flags RST 1 ACK all direction downstream traffic-counter counter2 action block**

EXAMPLE 2:

This example creates the following traffic rule:

Name = rule3

IP addresses: all

Protocol = IS-IS

Direction = upstream

Traffic counter = none

Action = ignore (required since traffic-counter = none)

Since it is not TCP/UDP, port and flags are not applicable.

The only action performed will be **Ignore**.

SCE (config if)# **traffic-rule rule3 IP-addresses all protocol IS-IS direction upstream traffic-counter none action ignore**

EXAMPLE 3:

The following example demonstrates how to delete all traffic rules.

SCE(config if)# **no traffic-rule all**

Related Commands

unzip

Extracts a zip file to the current directory.

unzip *filename*

Syntax Description

filename	Zip file to be extracted.

Defaults

Command Modes

Privileged EXEC

Usage Guidelines

Authorization: admin

Examples

The following example extracts the zipfile.zip:

```
SCE#unzip zipfile.zip
Unzipping '/tffs0/zipfile.zip'...
Zip file has 3 entries:
  1.sli, 13429 bytes extracted
  preflut.sli, 12558 bytes extracted
  temp/SLI/x/IpraeLut.sli, 12929 bytes extracted
Finished, Extracted 3 files.
```

Related Commands

VLAN

Configures the VLAN environment.

VLAN *option*

Syntax Description

option	There are three options: *symmetric classify*, *symmetric skip*, *a-symmetric skip.*

Defaults

symmetric skip

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example configures the VLAN environment:.

SCE(config if)#**vlan symmetric skip**

Related Commands

vlan translation

Sets the VLAN translation constant for the network port side. The subscriber ports are doing the reverse operation. For example, if network is incrementing by 5 then subscriber port will be decremented by 5.

Use the [no] form of this command to disable vlan translation for this port (sets the value to zero).

vlan translation {increment | decrement} value *value*

no vlan translation

Syntax Description

value	The value of the VLAN translation constant for the network port side.

Defaults

value = 0

Command Modes

LineCard Interface Configuration

Usage Guidelines

Authorization: admin

Examples

The following example specifies a VLAN translation constant of 16 for the network port side .

SCE(config if)#**vlan translation increment value 16**

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