Cisco Reader Comment Card

General Information

1 Years of networking experience: _____ Years of experience with Cisco products: _____

2 I have these network types: ☐ LAN ☐ Backbone ☐ WAN
☐ Other: _____

3 I have these Cisco products: ☐ Switches ☐ Routers
☐ Other (specify models): _____

4 I perform these types of tasks: ☐ H/W installation and/or maintenance ☐ S/W configuration
☐ Network management ☐ Other: _____

5 I use these types of documentation: ☐ H/W installation ☐ H/W configuration ☐ S/W configuration
☐ Command reference ☐ Quick reference ☐ Release notes ☐ Online help
☐ Other: _____

6 I access this information through: ____% Cisco.com (CCO) ____% CD-ROM
____% Printed docs ____% Other: _____

7 I prefer this access method: _____

8 I use the following three product features the most:

Document Information

Document Title: Cisco Global Site Selector Command Reference

Part Number: 78-14362-01 S/W Release (if applicable): Version 1.0

On a scale of 1–5 (5 being the best), please let us know how we rate in the following areas:

_____ The document is written at my technical level of understanding.

_____ The information is accurate.

_____ The document is complete.

_____ The information I wanted was easy to find.

_____ The information is well organized.

_____ The information I found was useful to my job.

Please comment on our lowest scores:

Mailing Information

Company Name Date

Contact Name Job Title

Mailing Address

City State/Province ZIP/Postal Code

Country Phone ( ) Extension

Fax ( ) E-mail

Can we contact you further concerning our documentation? ☐ Yes ☐ No

You can also send us your comments by e-mail to **bug-doc@cisco.com**, or by fax to **408-527-8089**.

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL
FIRST-CLASS MAIL PERMIT NO. 4631 SAN JOSE CA

POSTAGE WILL BE PAID BY ADDRESSEE

ATTN DOCUMENT RESOURCE CONNECTION
CISCO SYSTEMS INC
170 WEST TASMAN DRIVE
SAN JOSE CA 95134-9883

Cisco Global Site Selector Command Reference

Version 1.0

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

Customer Order Number: DOC-14362=
Text Part Number: 78-14362-01

Cisco Global Site Selector Command Reference

CONTENTS

Preface

This preface describes who should read the *Cisco Global Site Selector Command Reference*, how it is organized and its document conventions. It contains the following sections:

Audience

This command reference is for experienced network administrators familiar with TCP/IP networking concepts and router configuration. To use this command reference, you should be familiar with the Cisco Content Router 4430 or 4480 Global Site Selector hardware. In addition, you should be familiar with basic TCP/IP and networking concepts, router configuration, Domain Name System (DNS), the Berkeley Internet Name Domain (BIND) software, as well as your organization's unique network configuration.

Document Organization

This command reference includes the following chapters:

Chapter	Title	Description
Chapter 1	Command-Line Interface Command Summary	Describes how to use the command-line interface and presents the commands and command syntax in tables.
Chapter 2	Cisco Global Site Selector Commands	Lists the GSS commands in alphabetical order and provides detailed descriptions of their use.

Document Conventions

This command reference uses basic conventions to represent text and table information.

Convention	Description
boldface font	Commands, keywords, and button names are in **boldface**.
italic font	Variables for which you supply values are in *italics*. Directory names and filenames are also in italics.
`screen` font	Terminal sessions and information the system displays are printed in `screen` font.
`boldface screen` font	Information you must enter is in **`boldface screen`** font.
`italic screen` font	Variables you enter are printed in *`italic screen`* font.
plain font	Enter one of a range of options as listed in the syntax description.
^D or **Ctrl-D**	Hold the **Ctrl** key while you press the **D** key.
string	Defined as a nonquoted set of characters. For example, when setting a community string for SNMP to "public," do not use quotation marks around the string, or the string will include the quotation marks.
Vertical bars (|)	Separate alternative, mutually exclusive, elements.
{ }	Elements in braces are required elements.
[ ]	Elements in square brackets are optional.
{**x** | **y** | **z**}	Required keywords are grouped in braces and separated by vertical bars.
[**x** | **y** | **z**]	Optional keywords are grouped in brackets and separated by vertical bars.
[{ }]	Braces within square brackets indicate a required choice within an optional element.

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

Caution Means *reader be careful*. In this situation, you might do something that could result in data loss or equipment damage.

Additional Documentation

For additional information, refer to the following documentation:

- *Regulatory Compliance and Safety Information for the Cisco Content Networking Product Series*
- *Cisco Global Site Selector 4480 Hardware Installation Guide*
- *Cisco Global Site Selector Configuration Guide*
- *Release Notes for the Cisco Global Site Selector Version 1.0*

Obtaining Documentation

The following sections explain how to obtain documentation from Cisco Systems.

World Wide Web

You can access the most current Cisco documentation on the World Wide Web at the following URL:

http://www.cisco.com

Translated documentation is available at the following URL:

http://www.cisco.com/public/countries_languages.shtml

Documentation CD-ROM

Cisco documentation and additional literature are available in a Cisco Documentation CD-ROM package, which is shipped with your product. The Documentation CD-ROM is updated monthly and may be more current than printed documentation. The CD-ROM package is available as a single unit or through an annual subscription.

Ordering Documentation

Cisco documentation is available in the following ways:

- Registered Cisco.com users (Cisco direct customers) can order Cisco product documentation from the Networking Products MarketPlace:

  http://www.cisco.com/cgi-bin/order/order_root.pl

- Registered Cisco.com users can order the Documentation CD-ROM through the online Subscription Store:

  http://www.cisco.com/go/subscription

- Nonregistered Cisco.com users can order documentation through a local account representative by calling Cisco corporate headquarters (California, USA) at 408 526-7208 or, elsewhere in North America, by calling 800 553-NETS (6387).

Documentation Feedback

If you are reading Cisco product documentation on Cisco.com, you can submit technical comments electronically. Click the **Fax** or **Email** option under the “Leave Feedback” at the bottom of the Cisco Documentation home page.

You can e-mail your comments to bug-doc@cisco.com.

To submit your comments by mail, use the response card behind the front cover of your document, or write to the following address:

Cisco Systems
Attn: Document Resource Connection
170 West Tasman Drive
San Jose, CA 95134-9883

We appreciate your comments.

Obtaining Technical Assistance

Cisco provides Cisco.com as a starting point for all technical assistance. Customers and partners can obtain documentation, troubleshooting tips, and sample configurations from online tools by using the Cisco Technical Assistance Center (TAC) Web Site. Cisco.com registered users have complete access to the technical support resources on the Cisco TAC Web Site.

Cisco.com

Cisco.com is the foundation of a suite of interactive, networked services that provides immediate, open access to Cisco information, networking solutions, services, programs, and resources at any time, from anywhere in the world.

Cisco.com is a highly integrated Internet application and a powerful, easy-to-use tool that provides a broad range of features and services to help you to

- Streamline business processes and improve productivity
- Resolve technical issues with online support
- Download and test software packages
- Order Cisco learning materials and merchandise
- Register for online skill assessment, training, and certification programs

You can self-register on Cisco.com to obtain customized information and service. To access Cisco.com, go to the following URL:

http://www.cisco.com

Technical Assistance Center

The Cisco TAC is available to all customers who need technical assistance with a Cisco product, technology, or solution. Two types of support are available through the Cisco TAC: the Cisco TAC Web Site and the Cisco TAC Escalation Center.

Inquiries to Cisco TAC are categorized according to the urgency of the issue:

- Priority level 4 (P4)—You need information or assistance concerning Cisco product capabilities, product installation, or basic product configuration.
- Priority level 3 (P3)—Your network performance is degraded. Network functionality is noticeably impaired, but most business operations continue.

- Priority level 2 (P2)—Your production network is severely degraded, affecting significant aspects of business operations. No workaround is available.
- Priority level 1 (P1)—Your production network is down, and a critical impact to business operations will occur if service is not restored quickly. No workaround is available.

Which Cisco TAC resource you choose is based on the priority of the problem and the conditions of service contracts, when applicable.

Cisco TAC Web Site

The Cisco TAC Web Site allows you to resolve P3 and P4 issues yourself, saving both cost and time. The site provides around-the-clock access to online tools, knowledge bases, and software. To access the Cisco TAC Web Site, go to the following URL:

http://www.cisco.com/tac

All customers, partners, and resellers who have a valid Cisco services contract have complete access to the technical support resources on the Cisco TAC Web Site. The Cisco TAC Web Site requires a Cisco.com login ID and password. If you have a valid service contract but do not have a login ID or password, go to the following URL to register:

http://www.cisco.com/register/

If you cannot resolve your technical issues by using the Cisco TAC Web Site, and you are a Cisco.com registered, you can open a case online by using the TAC Case Open tool at the following URL:

http://www.cisco.com/tac/caseopen

If you have Internet access, it is recommended that you open P3 and P4 cases through the Cisco TAC Web Site.

Cisco TAC Escalation Center

The Cisco TAC Escalation Center addresses issues that are classified as priority level 1 or priority level 2; these classifications are assigned when severe network degradation significantly impacts business operations. When you contact the TAC Escalation Center with a P1 or P2 problem, a Cisco TAC engineer will automatically open a case.

To obtain a directory of toll-free Cisco TAC telephone numbers for your country, go to the following URL:

http://www.cisco.com/warp/public/687/Directory/DirTAC.shtml

Before calling, please check with your network operations center to determine the level of Cisco support services to which your company is entitled; for example, SMARTnet, SMARTnet Onsite, or Network Supported Accounts (NSA). In addition, please have available your service agreement number and your product serial number.

Command-Line Interface Command Summary

This chapter provides a summary of the command-line interface (CLI) commands included in the *Cisco Global Site Selector Command Reference*. The command summary tables are grouped alphabetically in five categories: user-level EXEC commands, privileged-level EXEC commands, global configuration commands, interface configuration commands, and **show** EXEC commands. The CLI can be accessed through the console port or Telnet.

Accessing the CLI

You can access the command-line interface by establishing a remote connection or by connecting directly to the device using a dedicated terminal.

Accessing the CLI Using a Remote Connection

You can establish a remote connection with a Global Site Selector (GSS) using Telnet or Secure Shell (SSH).

In a single Telnet or SSH session, you cannot connect to more than one device; you can have several Telnet or SSH sessions running in parallel for different devices.

SSH connections are strongly recommended because SSH lets you communicate securely over insecure channels and provides strong authentication.

Use your preferred SSH or Telnet client, entering the host name or IP address of the GSS device (Global Site Selector or Global Site Selector Manager) as the host name, and using your GSS administrative username and password to log on to the device via remote connection.

Once you have logged on, you will be limited in your interaction with the GSS device to the commands described in this document.

Accessing the CLI Using a Serial Connection

Establish a serial connection between your terminal and the GSS device. For information on how to establish a serial connection with your device, refer to the *Cisco Global Site Selector 4480 Hardware Installation Guide.*

Once you are connected, you can use any terminal communications application to access the CLI. The following procedure uses HyperTerminal.

Step 1 Launch HyperTerminal.

The Connection Description window appears.

Step 2 Enter a name for your session in the **Name** field.

Step 3 Click **OK**.

The Connect To window appears.

Step 4 From the drop-down list, choose the COM port to which the device is connected.

Step 5 Click **OK**.

The Port Properties window appears. Set the port properties as follows:

- Baud Rate = 9600
- Data Bits = 8
- Flow Control = none
- Parity = none
- Stop Bits = 1

Step 6 Click **OK** to connect.

Step 7 Press **Enter** to display the command-line interface prompt.

Once a session is created, you can save the connection description by choosing **File** > **Save As**. Saving the connection description has the following two advantages:

- The next time you launch HyperTerminal, the session is listed as an option under **Start** > **Programs** > **Accessories** > **HyperTerminal** > **Name_of_session**. This option lets you reach the CLI prompt directly without going through the configuration steps.
- You can connect your cable to a different device without configuring a new HyperTerminal session. If you use this option, make sure that you connect to the same port on the new device as was configured in the saved HyperTerminal session. Otherwise, a blank screen appears without a prompt.

Using Command-Line Processing

GSS software commands are not case sensitive. You can abbreviate commands and parameters as long as they contain enough letters to be different from any other currently available commands or parameters. You can scroll through the last 20 commands stored in the history buffer and enter or edit the command at the prompt. (See Table 1-1.)

Table 1-1 Command-Line Processing Keystroke Combinations

Keystroke Combination	Description
Ctrl-A	Jumps to the first character of the command line.
Ctrl-B or the Left Arrow key	Moves the cursor back one character.
Ctrl-C	Escapes and terminates prompts and tasks.
Ctrl-D	Deletes the character at the cursor.
Ctrl-E	Jumps to the end of the current command line.
Ctrl-F or the Right Arrow key[1]	Moves the cursor forward one character.
Ctrl-K	Deletes from the cursor to the end of the command line.
Ctrl-L	Repeats the current command line on a new line.
Ctrl-N or the Down Arrow key[1]	Enters the next command line in the history buffer.
Ctrl-P or the Up Arrow key[1]	Enters the previous command line in the history buffer.
Ctrl-T	Transposes the character at the cursor with the character to the left of the cursor.
Ctrl-U; Ctrl-X	Deletes from the cursor to the beginning of the command line.
Ctrl-W	Deletes the last word typed.
Esc-B	Moves the cursor back one word.
Esc-D	Deletes from the cursor to the end of the word.
Esc-F	Moves the cursor forward one word.
Delete key or Backspace key	Erases a mistake when entering a command; reenter the command after using this key.

1. The arrow keys function only on ANSI-compatible terminals such as VT100s.

Command Modes

There are three command modes for the GSSCLI. The three modes are:

- EXEC
- Global configuration
- Interface configuration

EXEC Mode

The two EXEC access levels are privileged and user. The **enable** and **disable** commands switch between the two levels. The user-level EXEC command line is available to users if they enter a valid password. The user-level EXEC commands are a subset of the privileged-level EXEC commands. The user-level EXEC prompt is the host name followed by a right angle bracket (>). The prompt for the privileged-level EXEC command line is the pound sign (#). To execute an EXEC command, enter the command at the EXEC system prompt and press the **Return** key. In the following example, a user accesses the privileged-level EXEC command line from the user level.

```
Host> enable
Host#
```

Use the **Delete** or **Backspace** key sequences to edit commands when you type commands at the EXEC prompt.

As a shortcut, you can abbreviate commands to the fewest letters that make them unique. For example, the letters **sho** can be entered for the **show** command.

Certain EXEC commands display multiple screens with the following prompt at the bottom of the screen:

```
--More--
```

Press the **Spacebar** to continue the output, or press **Return** to display the next line. Press any other key to return to the prompt. Also, at the --More-- prompt, you can enter a **?** to display the help message.

To leave EXEC mode, use the **exit** command at the system prompt:

```
Host# exit
```

See the "EXEC Command Summary" section on page 1-7 for a summary of EXEC-level commands.

Global Configuration Mode

To enter the global configuration mode, use the **configure** privileged EXEC command. You must be in global configuration mode to enter global configuration commands.

```
Host# configure
Host(config)#
```

To exit global configuration mode, use the **end** global configuration command:

```
Host(config)# end
```

You can also exit global configuration mode by entering the **exit** command or by pressing **Ctrl-Z**.

See the "Global Configuration Command Summary" section on page 1-10 for a summary of Global configuration-level commands.

Interface Configuration Mode

To enter interface configuration mode, use the **interface** global configuration command. The following example demonstrates how to enter interface configuration mode:

```
Host# config
Host(config)# interface ethernet 0
Host(config-eth0)#
```

To exit interface configuration mode, enter **exit** to return to global configuration mode:

```
Host(config-eth0)# exit
Host(config)#
```

See the "Interface Configuration Command Summary" section on page 1-11 for a summary of interface configuration-level commands.

Check Command Syntax

The user interface provides error isolation in the form of an error indicator, a caret symbol (^). The ^ symbol appears at the point in the command string where you have entered an incorrect command, keyword, or argument.

In the following example, a syntax error occurs in the process of setting the device clock. Context-sensitive help is then used to check the syntax for setting the clock and correct the mistake.

```
Host#clock 20:06:00 26 march 2002
         ^
% Invalid input detected at '^' marker.

Host#clock ?
  set       Set the time and date
  timezone  Set timezone
```

The help output shows that the **set** keyword is required. Press the **Up Arrow** to automatically repeat the previous command entry. Then add a space and question mark (?) to display the additional arguments:

```
Host#clock set ?
  <0-23>:  Current Time (hh:mm:ss)

Host#clock set 20:00:00
% Incomplete command.
Host#clock set 20:00:00?
<0-59>
Host#clock set 20:00:00 ?
  <1-31>     Day of Month
  april
  august
  december
  february
  january    Month of the Year
  july
  june
  march
  may
  november
  october
  september
Host#clock set 20:00:00 march ?
  <1-31>  Day of Month
Host#clock set 20:00:00 march 26 ?
  <1993-2035>  Year
Host#clock set 20:00:00 march 26 2002
```

Controlling Command Output

You can control the output of your GSS CLI commands--filtering it, or saving it to a file--using special operators that are added to your command syntax. The following table presents information on the various command options that allow you to control the output generated by GSS commands.

Table 1-2 Command-Line Output Processing Syntax Options

Command Line Syntax	Description

|**grep** *text*	Grep operator. When coupled with a CLI command, this operator filters command output to display only output containing words or text that you specify. For example, the following command would list only files containing "log" in a directory:
	`Host>ls`
	`platform.cfg`
	`props.cfg`
	`props.cfg.startup`
	`runmode-comment`
	`running.cfg`
	`squid`
	`sysMessages.log`
	`syslog-messages.log`
	`sysmsg`
	`sysout`
	`system.log`
	`tmp`
	`tomcat`
	`trace.log`
	
	`Host>ls |grep log`
	`sysMessages.log`
	`syslog-messages.log`
	`system.log`
	`trace.log`

>	Redirect operator. When coupled with a CLI command, this operator saves command output to a file, for example: `Host#show processes >output`

System Help

You can obtain help when you enter commands by using the following methods:

- For a brief description of the context-sensitive help system, enter **help**.
- To list all commands for a command mode, enter a question mark (**?**) at the system prompt.
- To obtain a list of commands that start with a particular character set, enter an abbreviated command immediately followed by a question mark (**?**).

```
Host# cl?
clear clock
```

- To list the command keywords or arguments, enter a space and a question mark (**?**) after the command:

```
Host# clock ?
  clear  Clear the current time from the battery-backed clock
  save   Save the current time into the battery-backed clock
  set    Set the local time and date
```

Save Configuration Changes

To avoid losing new configurations, save them to NVRAM using the **copy** or **write** commands, as shown in the following example:

```
Host# copy running-config startup-config
```

or

```
Host# write
```

See the command description for the **copy running-config startup-config** command for more information on "running" and "saved" configuration modes.

EXEC Command Summary

The GSS software EXEC commands are entered in EXEC mode. Table 1-3 lists the user-level EXEC commands. Table 1-4 lists the privileged-level EXEC commands.

Table 1-3 GSS Software User-Level EXEC Commands

User EXEC Command	Syntax	Description
cd	**cd** *directoryname*	Changes the current directory.
dir	**dir** [*directory*]	Displays files in long list format.
dnslookup	**dnslookup** {*hostname* | *domainname*}	Resolves host name (DNS).
enable	**enable**	Accesses privileged EXEC commands.
exit	**exit**	Exits from terminal session.
ftp	**ftp** {*hostname* | *ip-address*}	Enables or disables FTP, or opens an FTP session.
help	**help**	Provides assistance for command line-interface.
lls	**lls** [*directory*]	Displays directory files in long list format.
ls	**ls** [*directory*]	Displays files in directory.
ping	**ping** {*hostname* | *ip-address*}	Sends ICMP echo packets.
pwd	**pwd**	Displays path name of the present working directory.
scp	**scp {***source_path* [*source_filename*] *target_host***:***target_path***}** **scp** {*source_host***:**/*source_path* [*source_filename*] *target_path*}	Securely copies files from or to a location.
show	**show {clock | ftp | ntp | ssh | telnet | terminal-length | uptime | user** *username* **| users | version}**	Displays configuration information and system properties for your GSS device and its components, as well as global server load balancing resources.
snmp	**snmp enable**	Enables or disables Simple Network Management Protocol (SNMP) on your GSS device.

Table 1-3 GSS Software User-Level EXEC Commands (continued)

User EXEC Command	Syntax	Description
tail	**tail** *filename*	Displays the last 10 lines of the named file.
telnet	**telnet** [**enable**] [*hostname* | *ip-address*]	Opens a Telnet session.
type	**type** *filename*	Displays the contents of a file on the console.
?	**?**	Generates a list of user EXEC commands.

Table 1-4 GSS Software Privileged-Level EXEC Commands

Privileged EXEC Command	Syntax	Description
clear	**clear statistics {boomerang | dns | keepalive {all | cra | http-head | icmp | kalap | ns}}**	Resets statistics for the named subsystem, for example: *kale* for Keep Alive Engine.
clock	**clock** {**set** *hh*:*mm*:*ss MONTH DD YYYY* | **timezone** *timezonename*}	Sets the device time or timezone.
configure	**configure**	Places the CLI session in configuration mode.
copy	**copy** {**disk startup-config** *filename* | **startup-config disk** *filename* **| running-config** [**disk** *filename* **| startup-config**}	Copies one of the following: • File from disk to the startup-config • The startup-config to a file on disk • The running-config to a file on disk • Technical support information to a file on disk
del	**del** *filename*	Deletes the named file.
delete-secure-keys	**delete-secure-keys**	Deletes the private key used for authentication.
disable	**disable**	Turns off privileged EXEC commands.
enable	**enable**	Accesses privileged EXEC commands.
exit	**exit**	Exits from the EXEC and configuration command levels to user level.
gss	**gss** {**enable { gssm-primary | gssm-standby** {*gssm_hostname* | *gssm_IP_address*} | **gss** {*gssm_hostname* | *gssm_IP_address*}**}** | **restart** | **start** | **status** | **stop** | **tech-report** *filename*}	Manages your GSS devices
gssm	**gssm** {**backup** {**database** *filename* | **full** *filename*}| **database** {**create** | **delete** | **invalidate** | **maintain** | **purge-log-records** {**count** *number_records*| **days** *number_days*} | **report** | **status** | **validate**}| **primary-to-standby** | **restore** *filename* | **standby-to-primary**}	Manages your Global Site Selector Manager and its embedded database.
install	**install** *filename*	Installs a new version of the GSS software.

Table 1-4 GSS Software Privileged-Level EXEC Commands (continued)

Privileged EXEC Command	Syntax	Description
lsof	**lsof**	Lists open files.
reload	**reload**	Halts and performs a cold restart.
restore factory-defaults	**restore factory-defaults**	Sets the GSS configuration to the factory-default state.
rotate-logs	**rotate-logs**	Forces the GSS to rotate log files.
scp	**scp {***source_path* **[***source_filename***]** *target_IP_address***:***target_path* **|** *source_IP_address***:/***source_path* **[***source_filename***]** *target_path***}**	Securely copies files from or to a location.
show	**show {access-group | access-list | clock | ftp | interface {0 | 1} | ip routes | logging | logs {follow | tail} | memory | ntp | processes | properties | running-config | ssh | startup-config | statistics {boomerang {domain** *domain_name* **| global } | dns {answer-group {list |** *group_name***} | domain {list |** *domain_name***}| domain-group {list |** *domain_group_name***}| global | rule {list |** *rule_name***}| source-address-group {list |** *sa_group_name***}} | keepalive {all | cra {***IP_address* **| list}| global | http-head {***IP_address* **| list} | icmp {***IP_address* **| list} | kalap {***IP_address* **| list} | ns {***IP_address* **| list}}}| system-status | tech-support | telnet | terminal-length | uptime | user** *username* **| users | version}**	Displays configuration information and system properties for your GSS device and its components, as well as global server load balancing resources.
shutdown	**shutdown**	Shuts down the operating system.
tcpdump	**tcpdump {eth0 | eth1}**	Outputs all traffic to and from a particular GSS interface
telnet	**telnet** {*hostname* **|** *ip-address*}	Opens a Telnet session.
type	**type** *filename*	Displays the contents of a file.
write	**write memory**	Copy the running configuration as the new startup configuration.

Global Configuration Command Summary

The global configuration Content Engine commands are entered in the global configuration mode. Table 1-5 lists the global configuration commands.

Table 1-5 GSS Software Global Configuration Commands

Global Configuration Command	Syntax	Description
access-group	**access-group** *name* **interface** {**eth0** | **eth1**}	Assigns an access list to a GSS network interface.
access-list	**access-list** *name* {**permit** | **deny**} *protocol* [**type** *icmp-type*] [*source-address source-netmask* | **host** *source-address* | *any*] *operator port* [*port*] [**destination-port** *operator port* [*port*]]	Configures access lists on the GSS.
end	**end**	Exits configuration and privileged EXEC modes.
exec-timeout	**exec-timeout** *timeout*	Configures the length of time that an inactive Telnet session remains open.
exit	**exit**	Exits configuration and privileged EXEC modes.
ftp	**ftp** {**enable** | {*hostname* | *IP_address*}	Enables or disables FTP on the GSS device, or opens an FTP session with a remote host device.
help	**help**	Provides assistance for the command-line interface.
hostname	**hostname** *name*	Configures the system's network name.
interface	**interface Ethernet** {**0** | **1**}{**autosense** | **bandwidth** *mbits* | **fullduplex** | **halfduplex** | **ip address** {*ip-address netmask*} | **no** | **gss-communications** | **shutdown}**	Configures the Ethernet interface on the GSS device.
ip	**ip {default-gateway** *ip-address* | **domain-name** *name* | **name-server** *ip-addresses* | **route** *destination_address netmask gateway* }	Configures Internet Protocol.
logging	**logging** {**disk** {**enable** | **priority** *loglevel* | **subsystem** *name* **priority** *loglevel*} | **host** {**enable** | **ip** *ip_addresses*| **priority** *loglevel* | **subsystem** *name* **priority** *loglevel*}}	Configures system logging (syslog).
no	**no** {**access-group** | **access-list** | **copy** | **exec-timeout** | **ftp** | **help** | **hostname** | **interface** | **ip** | **logging** | **ntp-server** | **property** | **show** | **ssh** | **telnet** | **terminal-length** | **username** | **write**}	
ntp	**ntp** { **server** {*hostname* | *ip-address*} | **enable** }	Configures Network Time Protocol (NTP).

Table 1-5 GSS Software Global Configuration Commands (continued)

Global Configuration Command	Syntax	Description
property	**property set** *property_name property_value*	Enable, disable, or modify one of a variety of GSS system configuration options. Use this command only under the direct supervision of Cisco Technical Support.
show	**show {access-group** | **access-list** | **clock** | **ftp** | **interface {0** | **1}** | **ip routes** | **logging** | **logs {follow** | **tail}** | **memory** | **ntp** | **processes** | **properties** | **running-config** | **ssh** | **startup-config** | **statistics {boomerang {domain** *domain_name* | **global }** | **dns {answer-group {list** | *group_name***}** | **domain {list** | *domain_name***}**| **domain-group {list** | *domain_group_name***}**| **global** | **rule {list** | *rule_name***}**| **source-address-group {list** | *sa_group_name***}}** | **keepalive{all** | **cra {***IP_address* | **list}**| **global** | **http-head {***IP_address* | **list}** | **icmp {***IP_address* | **list}** | **kalap {***IP_address* | **list}** | **ns {***IP_address* | **list}}}**| **system-status** | **tech-support** | **telnet** | **terminal-length** | **uptime** | **user** *username* | **users** | **version}**	Displays configuration information and system properties for your GSS device and its components, as well as global server load balancing resources.
ssh	**ssh enable**	Configures SSH service parameters.
telnet	**telnet** [**enable**] [*hostname* | *ip-address*]	Enables or disables Telnet or opens a new Telnet session.
terminal	**terminal length** *number*	Sets the number of rows displayed on a terminal, between 0 (meaning no pauses in screen output) and 512.
username	**username** *name* {**password** *word* **privilege** {**user** | **admin**} | **delete**}	Creates or removes a user account.
write	**write memory**	Copies the running configuration as the new startup configuration.

Interface Configuration Command Summary

The interface configuration commands are entered in the interface configuration mode. Enable interface configuration mode by entering the **interface** command in global configuration mode.

For example:

```
Host# config
Host(config)# interface
Host(config-if)# autosense
```

To exit interface configuration mode, enter **exit** to return to global configuration mode.

```
Host(config-if)# exit
Host(config)#
```

Table 1-6 lists the interface configuration commands.

Table 1-6 GSS Software Interface Configuration Commands

Interface Command	Syntax	Description
autosense	**autosense**	Sets current interface to autosense.
bandwidth	**bandwidth** *mbits*	Sets specified interface line speed (10, 100 Mbps).
exit	**exit**	Exits from interface mode.
fullduplex	**fullduplex**	Sets current interface to full-duplex mode.
gss-communications	**gss-communications**	Configures the interface for commmunication between GSS devices
gss-tcp-keepalives	**gss-tcp-keepalives**	Configures the interface for use receiving TCP keepalive information
halfduplex	**halfduplex**	Sets current interface to half-duplex mode.
ip address	**ip** {**address** *ip-address ip-subnet*}	Configures the Internet Protocol parameters for the specified interface.
no	**no** {**autosense** | **bandwidth** | **fullduplex** | **gss-communications** | **gss-tcp-keepalives** | **halfduplex** | **ip** | **show** | **shutdown** }	Negates a command or sets its defaults.
show	**show {access-group** | **access-list** | **clock** | **ftp** | **interface {eth0** | **eth1}** | **ip** | **logging** | **memory** | **ntp** | **processes** | **properties** | **running-config** | **ssh** | **startup-config** | **statistics {boomerang {domain** *domain_name* | **global }** | **dns {answer-group {list** | *group_name***}** | **domain {list** | *domain_name***}**| **domain-group {list** | *domain_group_name***}**| **global** | **rule {list** | *rule_name***}**| **source-address-group {list** | *sa_group_name***}}** | **keepalive{all** | **cra {***IP_address* | **list}**| **global** | **http-head {***IP_address* | **list}** | **icmp {***IP_address* | **list}** | **kalap {***IP_address* | **list}** | **ns {***IP_address* | **list}}}**| **system-status** | **tech-support** | **telnet** | **terminal-length** | **uptime** | **user** *username* | **users** | **version}**	Displays configuration information and system properties for your GSS device and its components, as well as global server load balancing resources.
shutdown	**shutdown**	Shuts down the specified interface.

Cisco Global Site Selector Commands

This chapter provides an alphabetical listing of the command-line interface (CLI) commands for the Cisco Global Site Selector (GSS). EXEC, global configuration, and interface configuration commands are all included in this chapter.

Documentation of each command contains some combination of the following information:

- Command syntax—information on the correct structure and syntax for the command
- Usage guidelines—detailed information that describes the purpose of the command and its proper application
- Examples—command syntax as it would actually appear in a CLI session
- Related commands—other CLI commands with a purpose that is closely related to or dependent on the current command

For more information on accessing a CLI session, or the different CLI command modes, see Chapter 1, “Command-Line Interface Command Summary.”

?

To display a list of the available commands and syntax options, use the **?** command, for example:

?

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Usage Guidelines

This command displays the commands and syntax options available to you at the point at which you enter the command.

Command Modes

User EXEC, privileged EXEC, global configuration, interface configuration

Examples

In the following example, the **?** command displays the possible commands at a variety of junctures.

```
Host> ?
cd          Change directory
dir         Directory list
dnslookup   Resolve hostname (DNS)
enable      Turn on privileged commands
exit        Exit from the EXEC
ftp         Open FTP session to host
help        Description of the interactive help system
lls         list files in long info
ls          Directory list
ping        Ping a remote host
pwd         Show present working directory
scp         SecureCopy files [scp from to]
show        Show running system information
telnet      Open telnet session to host
type        View a file
Host> show ?
clock             Display system clock
ftp               Display ftp status
ntp               Display NTP configuration
ssh               Display ssh status
telnet            Display telnet status
terminal-length   Display terminal length
uptime            Display system uptime
user              Display user information
users             Display configured users
version           Display system version
```

Related Commands

help

access-group

To assign an access list to an interface on your GSS, use the **access-group** global configuration command. To disassociate access lists from an interface, use the **no** form of this command.

access-group *name* **interface** {**eth0** | **eth1**}

Syntax Description

name	Name of the access list.
interface	Specifies an interface on the GSS to which the access list will be assigned.
eth0	Identifies the first Ethernet interface on the GSS device.
eth1	Identifies the second Ethernet interface on the GSS device.

Defaults

No default behavior or values

Command Modes

Global configuration

Usage Guidelines

To assign an access list to a GSS interface use the **access-group** command. An access list is a set of rules used to filter traffic to the GSS. If no access list is assigned to an interface, that interface will permit all packets to pass to the GSS.

Only one access list can be assigned to an interface at a time.

Examples

```
Host(config)# access-group icmp-rule eth0
```

Related Commands

access-list

interface

access-list

To configure access lists on the GSS that allow you to permit or deny packets access based on criteria that you establish such as protocol type, source address, or destination port, use the **access-list** global configuration command. To modify or delete access lists from your GSS, use the **no** form of this command.

access-list *name* {**permit** | **deny**} *protocol* [*source-address source-netmask* | **host** *source-address* | *any*] *operator port* **[***port***]** [**destination-port** *operator port* [*port*]]

no access-list *name* {**permit** | **deny**} *protocol* [*source-address source-netmask* | **host** *source-address* | *any*] *operator port* **[***port***]** [**destination-port** *operator port* [*port*]]

Syntax Description

name	Alphanumeric name used to identify the access list you are creating.
permit	When attached to an access condition, allows a connection when a packet matches the condition. All provisions of the condition must be met to make a match.
deny	When attached to an access condition, prevents a connection when a packet matches the condition. All provisions of the condition must be met to make a match.
protocol	The Internet protocol by which the packet is being sent. Recognized values are: • tcp—Transmission Control Protocol • udp—User Datagram Protocol • icmp—Internet Control Message Protocol
source-address	Network IP address from which the packet originated. The software uses the *source-address* and *source-netmask* arguments to match the incoming packet to a source network.
source-netmask	Netmask for the network from which the packet originated. The software uses the *source-address* and *source-netmask* arguments to match the incoming packet to a source network.
host	Host machine that is the source of the packet
source-address	IP address of the device that is the source of the packet
any	Wildcard value for the packet source. With *any* used in place of either the *source-address*, *source-netmask*, or **host** *source-address* values, packets from all incoming sources will match.
operator	Compares arbitrary bytes within the packet. Can be one of the following values: • eq—equal • neq—not equal • range—range
port	Source or destination port of the packet.
destination-port	Compares the destination port of the packet with the access condition.

Defaults

This command has no default behavior or values.

Command Modes

Global configuration

Usage Guidelines

To accept or deny packets arriving at the GSS based on criteria such as the transfer protocol used and the packet source address, use the **access-list** command. An access list is a set of rules used to filter traffic to the GSS device. Rules can be used to either permit or deny packets and are associated with a particular interface using the **access-group** command. Each access list consists of one or more conditions. If packet does not match any of the access-list rules for an interface, it is automatically dropped.

Examples

```
Host(config)# access-list rule1 1.2.3.4 255.255.255.240 type redirect
Host(config)# access-list rule2 permit udp any destination-port eq 80
Host(config)# access-list rule3 permit tcp host 1.2.3.4
Host(config)# no access-list rule4 permit udp any destination-port eq 80
```

Related Commands

autosense

To enable autosense on an interface, use the **autosense** interface configuration command. To disable this function, use the **no** form of this command.

autosense

no autosense

Syntax Description

This command has no arguments or keywords.

Defaults

Autosense is enabled by default.

Command Modes

Interface configuration

Usage Guidelines

The **autosense** command is part of the suite of interface commands for the GSS and can only be used along with the **interface** command.

When enabled, the autosense feature allows the current GSS interface to select the proper mode (i.e. full-duplex, half-duplex) for communicating with other network devices.

Make sure that **autosense** has been disabled before configuring an Ethernet interface. When **autosense** is on, manual configurations are overridden.

You must reboot the GSS using the **reload** command following a change to the autosense setting on an interface.

Examples

```
Host(config)# interface eth0
Host(config-eth0)# autosense

Host(config-eth0)# no autosense
```

Related Commands

interface

bandwidth

To configure an interface bandwidth, use the **bandwidth** interface configuration command. To restore default values, use the **no** form of this command.

bandwidth *mbits*

no bandwidth

Syntax Description

mbits	Bandwidth size in megabits per second (Mbps) (10 or 100).

Command Modes

Interface configuration

Usage Guidelines

Use this command to set the bandwidth on Fast Ethernet interfaces only. Gigabit Ethernet interfaces run at 1000 Mbps only and are not user-configureable.

Examples

```
Host(config)# interface eth0
Host(config-eth0)# bandwidth 10

Host(config-eth0)# no bandwidth
```

cd

To change directory, use the **cd** command in user or privileged EXEC mode.

cd *directoryname*

Syntax Description

directoryname	Name of the directory.

Defaults

No default behavior or values

Command Modes

User and privileged EXEC

Usage Guidelines

Use this command to maneuver between directories and for file management. The directory name becomes the default prefix for all relative paths. Relative paths do not begin with a slash "/". Absolute paths begin with a slash "/".

Enter **cd..** to move to the directory that is one level higher than the one you are in.

Examples

Relative path:

```
Host> cd local1
```

Absolute path:

```
Host> cd /local1
```

Related Commands

dir

lls

ls

lsof

pwd

clear

To reset GSS statistics for a specific subsystem, use the clear command.

clear statistics {boomerang | dns | keepalive {all | cra | http-head | icmp | kalap | ns}}

Syntax Description

statistics	Reset load balancing statistics on the GSS
boomerang	Reset statistics relating to the Boomerang server component of the GSS
dns	Reset statistics relating to the DNS server component of the GSS
keepalive	Reset statistics relating to the KeepAlive Engine (KALE) component of the GSS
all	Reset statistics for all keepalive types maintained by the KALE
cra	Reset statistics for only cra-type keepalives maintained by the KALE
http-head	Reset statistics for only the VIP http-head type keepalive maintained by the KALE
icmp	Reset statistics for only the VIP icmp-type keepalive maintained by the KALE
kalap	Reset statistics for only the VIP kala-type keepalive maintained by the KALE
ns	Reset statistics for the name server (ns) -type keepalive maintained by the KALE

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

Use the **clear** command to reset global server load balancing statistics for one or more of your GSS components. Clearing statistics for a GSS component will erase all record of routing activity and performance for that device. When clearing statistics for a keepalive type, you must have at least one of that keepalive type already configured on your network.

Examples

```
Host#clear statistics boomerang
Host#clear statistics dns
Are you sure? (yes/no) yes
Host#clear statistics kale cra
Are you sure? (yes/no) yes
cra keepalive statistics cleared
Host#clear statistics kale kalap
Are you sure? (yes/no) yes
kal-ap keepalive statistics cleared
```

clock

To set the current time or time zone for a GSS device, use the **clock** EXEC command.

clock {**set** *hh***:***mm***:***ss MONTH DD YYYY* | **timezone** *timezonename*}

Syntax Description

set	Sets the device clock to the date and time provided.
hh:mm:ss	Current time to which the GSS device clock is being reset, using two digits for the hours, minutes, and seconds.
MONTH DD YYYY	Current date to which the GSS device clock is being reset using the full name of the month, a two digit day and four digit year. The following month names are recognized: • January • February • March • April • May • June • July • August • September • October • November • December
timezone	Sets the device to recognize the time zone provided as its time zone.
timezonename	The name of the timezone. Enter **?** to list all supported timezone names.

Defaults

No default behavior or values

Command Modes

EXEC

Examples

In the following examples, the **clock** command is used to set the GSS device time and timezone.

```
Host# clock set 13:01:05 march 24 2003
Host# clock timezone GMT
```

configure

To enter global configuration mode, use the **configure** command in privileged EXEC mode. You must be in global configuration mode to enter global configuration commands.

configure

To exit global configuration mode, use the **end**, **Ctrl-Z**, or **exit** commands.

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

The **configure** command is a privileged-level command, so you must enter **enable** before entering **configure**.

Examples

```
Host> enable
Host# configure
Host(config)#
```

Related Commands

Ctrl-Z

end

exit

copy

To copy configuration settings to or from the GSS device, use the **copy** command.

copy {**disk startup-config** *filename* | **startup-config disk** *filename* **| running-config [disk** *filename* **| startup-config] }**

Syntax Description

disk startup-config	Loads the GSS device startup configuration settings from a named file located on the GSS.
startup-config disk	Copies the GSS device startup configuration to a named file on the GSS.
running-config disk	Copies the GSS device current running configuration to a named file on the GSS.
running-config startup-config	Copies the GSS device current running configuration as the new startup configuration.
filename	Name of the output file containing startup- config or running-config information.

Defaults

No default behavior or values

Command Modes

EXEC

Usage Guidelines

When supplying an output filename enter the name only. Do not include path information with the file name.

Examples

In the following examples, the **copy** command is used to load a new startup configuration to the device from a file, and to copy the current running configuration to a file.

```
Host# copy disk startup-config configfile
Host# copy running config disk runconfigfile
```

Related Commands

scp

ftp

del

Use the **del** command to delete files from your GSS device.

del *filename*

Syntax Description

filename	Name of the file to be deleted

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Examples

```
Host> enable
Host# del oldtechrept.tgz
Host#
```

Related Commands

copy

delete-secure-key

delete-secure-key

To remove the private key used for secure-key content authentication on the GSS, use the **delete-secure-key** privileged EXEC command.

delete-secure-key

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Examples

```
Host> enable
Host# delete-secure-key
delete keys
Host#
```

dir

To view a long list of files in a directory, use the **dir** EXEC command.

dir [*directory*]

Syntax Description

directory	(Optional) Name of the directory to list.

Defaults

No default behavior or values

Command Modes

EXEC

Usage Guidelines

Use this command to view a detailed list of files contained within the working directory, including names, sizes, and time created. The equivalent command is **lls**.

Examples

```
Host# dir
size            time of last change                name
--------------  -------------------------          -----------
       3931934  Tue Sep 19 10:41:32 2000           errlog-cache-20000918-164015
           431  Mon Sep 18 16:57:40 2000           ii.cfg
           431  Mon Sep 18 17:27:46 2000           ii4.cfg
           431  Mon Sep 18 16:54:50 2000           iii.cfg
          1453  Tue Sep 19 10:34:03 2000           syslog.txt
          1024  Tue Sep 19 10:41:31 2000  <DIR>    testdir
```

Related Commands

ls

lls

disable

To turn off privileged EXEC mode, use the **disable** command in privileged EXEC mode.

disable

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

The **disable** command places you in user EXEC mode. To turn privileged EXEC mode back on, use the **enable** command.

Examples

```
Host# disable
Host>
```

Related Commands

enable

exit

dnslookup

To resolve a host or domain name to an IP address, use the **dnslookup** EXEC command.

dnslookup {*hostname* | *domainname*}

Syntax Description

hostname	Name of host on the network.
domainname	Domain name.

Defaults

No default behavior or values

Command Modes

EXEC

Examples

In the following examples, the **dnslookup** command is used to resolve the host name **myhost.cisco.com** to IP address 172.31.69.11, **cisco.com** to IP address 192.168.219.25, and the IP address 10.0.11.0 to **thehost.cisco.com**.

```
Host# dnslookup myhost
official hostname: myhost.cisco.com
          address: 172.31.69.11

Host# dnslookup cisco.com
official hostname: cisco.com
         address: 192.168.219.25

Host# dnslookup  10.0.11.0
official hostname: thehost.cisco.com
          address: 10.0.11.0
```

enable

To access privileged EXEC commands, use the **enable** EXEC command.

enable

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

EXEC

Usage Guidelines

To access privileged EXEC mode from user EXEC mode, use the **enable** command. The **disable** command takes you from privileged EXEC mode to user EXEC mode.

Examples

```
Host> enable
Host#
```

Related Commands

disable

exit

end

To exit the EXEC or global configuration command shell, use the **end** EXEC or global configuration command.

end

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Global configuration

Usage Guidelines

Use the **end** command in any configuration mode to return to EXEC mode. This is equivalent to the **Ctrl-Z** or the **exit** command.

The **end** command issued in the user-level EXEC shell terminates the console or Telnet session.

Examples

```
Host(config)# end
Host# end
Host>
```

Related Commands

Ctrl-Z

exit

exec-timeout

To modify the length of time that must expire before a GSS device automatically logs off an inactive user, use the **exec-timeout** global configuration command.

exec-timeout *minutes*

no exec-timeout

minutes	Length of time, in minutes, that accounts must be inactive before they are timed out (0 to 44,640 minutes).

Defaults

The default timeout for a GSS device is 150 minutes.

Command Modes

Global configuration

Usage Guidelines

Use the **exec-timeout** command in global configuration mode to lengthen or shorten the period for which a user logged on to a GSS device in EXEC-mode must be idle before the session is automatically terminated. Users logged on to GSS devices in CONFIG-mode are not affected by the exec-timeout setting.

Use the **no**- form of this command to erase the exec-timeout setting and restore the default timeout value of 150 minutes on the GSS device.

Examples

```
Host(config)# exec-timeout 10
```

exit

To access the EXEC command shell from the global, interface, and debug configuration command shells, use the **exit** EXEC, global configuration, and interface configuration command.

exit

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

EXEC, global configuration, and interface configuration

Usage Guidelines

Use the **exit** command in any configuration mode to return to EXEC mode. This is equivalent to the **Ctrl-Z** or the **end** command.

The **exit** command issued in the user-level EXEC shell terminates the console or Telnet session.

Examples

```
Host(config)# exit
Host# exit
Host>
```

Related Commands

end

ftp

To enable File Transfer Protocol (FTP) or launch an FTP session on your GSS device, use the **ftp** EXEC and global configuration command. Use the **no** form of this command in global configuration mode to disable FTP on your GSS device.

ftp enable

no ftp enable

Syntax Description

enable	Enables FTP server on the selected device.

Defaults

FTP is disabled on your GSS device by default.

Command Modes

EXEC and global configuration

Usage Guidelines

Use the **ftp enable** command in global configuration mode to enable the FTP server on the selected device. Use the **ftp** command in EXEC or global configuration mode to launch the FTP client, which can be used to transfer a file to and from remote machines.

Examples

```
Host(config)# ftp enable
Host# ftp
```

Related Commands

show ftp

telnet

scp

fullduplex

To configure an interface for full-duplex operation, use the **fullduplex** interface configuration command. To disable this function, use the **no** form of this command.

fullduplex

no fullduplex

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Interface configuration

Usage Guidelines

Use this command to configure an interface for full-duplex operation. Full duplex allows data to travel in both directions at the same time through an interface or a cable. A half-duplex setting ensures that data only travels in one direction at any given time. Although full duplex is faster, the interfaces sometimes cannot operate effectively in this mode. If you encounter excessive collisions or network errors, configure the interface for half duplex rather than full duplex.

Examples

```
Host(config)# interface eth0
Host(config-eth0)# fullduplex

Host(config-eth0)# no fullduplex
```

Related Commands

halfduplex

gss

To manage your GSS devices, use the **gss** privileged EXEC command.

gss {**enable { gssm-primary | gssm-standby** {*primary_GSSM_hostname* | *primary_GSSM_IP_address*} | **gss** {*primary_GSSM_hostname* | *primary_GSSM_IP_address*}**}** | **restart** | **start** | **status** | **stop** | **tech-report** *filename*}

Syntax Description

enable	Enables the selected device to act as the type of device you specify--either a GSSM or GSS
gssm-primary	Configures the selected device to act as the primary Global Site Selector Manager (GSSM) for your GSS network, responsible for maintaining status information on GSS devices as well load balancing information that is distributed to devices on the network
gssm-standby	Configures the selected device to act as a standby GSSM which will take over GSS network management should the primary GSSM go offline
primary_GSSM_hostname	The DNS hostname of the device currently serving as the primary GSSM
primary_GSSM_IP_address	The network address of the device currently serving as the primary GSSM
gss	Indicates that the selected device should serve as a Global Site Selector (GSS) on the GSS network
restart	Restarts the GSS software on the selected device after it has been stopped
start	Starts the GSS software on the selected device following initial configuration or a software upgrade.
status	Displays detailed information on the current operating state of the GSS device including online status, software version, and CPU and memory usage for various GSS components
stop	Stops the GSS software prior to a software upgrade or other maintenance or troubleshooting activities
tech-report	Generates a detailed report for use by Cisco Technical Assistance Center (TAC) representatives in troubleshooting persistent GSS problems. The file generated is a tar- format archive file with a .tgz extension
filename	The user-assigned name for the report generated by the tech-report command

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

The **gss** command provides a variety of options for managing your GSSs and GSS Managers, including:

- Designating individual devices to act as either Global Server Load Balancers, primary Global Site Selector Managers, or standby Global Site Selector Managers using the **gssm-primary**, and **gssm-standby gss** command options
- Control the GSS servers on the device so that you can perform required maintenance and software upgrades using the **start**, **stop**, and **restart** commands
- Outputting a detailed status report on the device for use by the Cisco TAC when troubleshooting using the **tech-report** command

Examples

```
Host#gss stop
Host#gss status
Cisco GSS(1.0.0.22.3) GSS Manager - primary [Wed Jul 10 18:45:25 UTC 2002]

Normal Operation [runmode = 5]

%CPU %MEM START   PID SERVER
 0.0  0.3 16:23   900           system
 0.0  0.4 16:23  1170         database
 0.0  1.6 16:23  1175           tomcat
 0.0  0.1 16:23  1459           apache
 0.0  2.2 16:23  1184              crm
 0.0  1.6 16:23  1216       crdirector
 0.0  0.1 16:23  1201        dnsserver
 0.0  0.1 16:23  1240        keepalive
 0.0  0.1 16:23  1220        boomerang
 0.0  1.6 16:23  1035          nodemgr
 0.0  0.0 16:23   419          syslogd
 ---  ---   ---   ---        ucd-snmpd [DISABLED]
```

Related Commands

gssm

gss-communications

gss-tcp-keepalives

gss-communications

To designate the current interface as the interface that will be used for GSS inter-device communicationon, use the **gss-communications** interface configuration command. To disable inter-device communications on the selected interface, use the **no** form of this command.

gss-communications

no gss-communications

Syntax Description

No arguments or keywords.

Defaults

The first ethernet interface (eth0) is used for inter-device communications by default.

Command Modes

Interface configuration

Examples

```
Host(config)# interface eth0
Host(config-eth0)#gss-communications
```

Related Commands

gss

gss-tcp-keepalives

interface

gss-tcp-keepalives

To designate the current interface as the interface that will be used for GSS keepalive communication, use the **gss-tcp-keepalives** interface configuration command. To disable keepalive communications on the selected interface, use the **no** form of this command.

gss-tcp-keepalives

no gss-tcp-keepalives

Syntax Description

No arguments or keywords.

Defaults

The first ethernet interface (eth0) is used for keepalive traffic by default.

Command Modes

Interface configuration

Examples

```
Host(config)# interface eth0
Host(config-eth0)#gss-tcp-keepalives
```

Related Commands

gss

gss-communications

interface

gssm

To manage your primary and standby Global Site Selector Managers and your GSS database, use the **gssm** privileged EXEC command.

gssm backup {**database** *filename* | **full** *filename*}| **database** {**create** | **delete** | **invalidate** | **maintain** | **purge-log-records** {**count** *number_records*| **days** *number_days*} | **report** | **status** | **validate**}| **primary-to-standby** | **restore** *filename* | **standby-to-primary**

Syntax Description

backup	Performs a backup of GSSM data on the GSS device.
database	Back up only the PostgreSQL database component of the GSSM, including device configuration information, DNS Rules, and other GSS network compontents
filename	Name of the database backup file. This can be the target file for a database backup action, or the source file for a database restore action.
full	Back up both the database component of the GSSM and its network and device configuration information
database	Create, configure, or remove the embedded PostgreSQL database on the GSSM
create	Creates the embedded, PostgreSQL database on the GSSM that stores and manages configuration information for the GSS network
delete	Deletes the GSSM database from the GSS device
invalidate	Invalidates GSSM database records.
maintain	Grooms the GSSM database, defragmenting and optimizing space allocation
restore	Restores the GSSM database from backup file named.
purge-log-records	Purges database records from the GSSM database for a specified period.
count	Purges a quantity of database records up to the last X records
number_records	The number of database records back from the last record that will be retained when the database is purged
days	Purges records covering a set time period up to X days before today
number_days	The number of days back from today for which database records will be retained when the database is purged
all	Purges all database records on the GSSM database.
count	Purges all database records up to the last *number* records in the database.
number	A variable representing the last x records in the database that are retained when purging the GSSM database.
days	Purges all database records except those created in the last *number* days.
number	A variable representing the last x days of activity to be retained when purging the GSSM database.
report	Generates and displays a report that identifies invalidated database records in the GSSM database.
status	Reports the current running status of GSSM database.
validate	Validates GSSM database records.
primary-to-standby	Changes the GSSM role from primary- to standby GSSM

restore	Restores the GSSM from a full backup file
filename	The name of the full GSSM backup image that will be used to restore the device
standby-to-primary	Changes the GSSM role from standby to primary

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

Use the **gssm database** command to manage the embedded PostgreSQL GSS database. The various command options allow you to monitor the status of your database as well as perform standard maintenance tasks such as backing up and restoring the database, validating database content, and purging records.

Use the **gssm standby-to-primary**and **primary-to-standby** command options to switch the role of the selected GSSM in your GSS network.

Use the **restore** command option to restore an earlier version of the GSSM from a full backup image.

Examples

In the following examples, the **gssm database** command is used to check the running status of the GSSM embedded database, back up the database to a file, purge all database records except for the last 50, and delete the database.

```
Host# gssm database report
GSSM database validation report written to validation.log
Host# gssm database status
GSSM database is running.
Host# gssm database validate
GSSM database passed validation.
Host# gssm primary-to-standby
Standby GSSM enabled.
Host# gssm standby-to-primary
Standby GSSM disabled.
```

Related Commands

gss

gss-communications

gss-tcp-keepalives

halfduplex

To configure an interface for half-duplex operation, use the **halfduplex** interface configuration command. To disable this function, use the **no** form of this command.

halfduplex

no halfduplex

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Interface configuration

Usage Guidelines

Use this command to configure an interface for half-duplex operation. Full duplex allows data to travel in both directions at the same time through an interface or a cable. A half-duplex setting ensures that data only travels in one direction at any given time. Although full duplex is faster, the interfaces sometimes cannot operate effectively in this mode. If you encounter excessive collisions or network errors, configure the interface for half duplex rather than full duplex.

Examples

```
Host(config)# interface eth0
Host(config-eth0)# halfduplex

Host(config-eth0)# no halfduplex
```

Related Commands

fullduplex

help

To obtain online help for the command-line interface, use the **help** EXEC or global configuration command.

help

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

EXEC and global configuration

Usage Guidelines

You can get help at any point in a command by entering a question mark (**?**). If nothing matches, the help list will be empty, and you must back up until entering a **?** shows the available options.

Two styles of help are provided:

- Full help is available when you are ready to enter a command argument (for example, **show ?**) and describes each possible argument.
- Partial help is provided when you enter an abbreviated command and you want to know what arguments match the input (for example, **show clock ?**).

Examples

```
Host# help
Host# help copy ?
```

hostname

To configure the network name of the GSS device, use the **hostname** global configuration command. To reset the host name to the default setting, use the **no** form of this command.

hostname *name*

no hostname *name*

Syntax Description

name	New host name for the GSS device; the name is case sensitive. The name may be from 1 to 22 alphanumeric characters.

Defaults

The default host name is localhost.localdomain.

Command Modes

Global configuration

Usage Guidelines

Use this command to configure the host name for the GSS device. The host name is used for the command prompts and default configuration filenames. The **no** form of this command erases the configured host name and restores the default value.

For the purposes of GSS inter-device communications, the hostname should be configured on the same interface (eth0 or eth1) that is being used for GSS communications, as set using the **gss-communications** command.

Examples

The following example changes the host name to gss1.cisco.com.

```
localhost.localdomain(config)# hostname gss1.cisco.com
gss1.cisco.com(config)#
```

The following example removes the host name.

```
gss1.cisco.com(config)# no hostname gss1.cisco.com
localhost.localdomain(config)#
```

Related Commands

gss-communications

interface

ip

install

To install a new version of the GSS software on your GSS device, use the **install** privileged EXEC command.

install *filename*

Syntax Description

filename	The name of the software update file.

Command Modes

Privileged EXEC

Usage Guidelines

Use this command to install a new image of the GSS software on the Cisco Global Site Selector hardware. The upgrade file must be present on the Global Site Selector before you execute this command.

Examples

The following example installs an updated version of the GSS software.

```
Host# install /gss.upg
```

Related Commands

show version

interface

To configure a GSS Ethernet interface, use the **interface** global configuration command.

interface Ethernet {0 | **1}{autosense** | **bandwidth** *mbits* | **exit | fullduplex** | **halfduplex** | **ip address** *ip-address netmask* | **no** | **gss-communications** | **shutdown}**

Syntax Description

Ethernet	Selects which of the Global Site Selector's two interfaces will be configured.
0	The first network interface.
1	The second network interface.
autosense	Sets interface to autosense.
bandwidth	Sets bandwidth of specified interface.
mbits	Bandwidth of interface in megabits per second (Mbps) (10, 100, or 1000).
exit	Exits interface configuration mode and returns you to configuration mode.
fullduplex	Sets interface to full-duplex operation.
halfduplex	Sets interface to half-duplex operation.
ip address	Sets IP address and subnet mask of the interface.
ip-address	IP address of interface.
netmask	Netmask of interface.
no	Negates the selected command or restores its default values.
gss-communications	Sets the current interface as the primary interface for the device, which is used for all GSS-related communications.
shutdown	Shuts down the specified interface.

Defaults

No default behavior or values

Command Modes

Global configuration

Usage Guidelines

Use the **interface** command to configure your GSS device Ethernet interfaces (0 or 1). Commands can be issued directly from global configuration mode, or you can use the **interface** command to enable interface configuration mode, which makes it easier to configure multiple interface parameters.

To display the interface identifiers (for example, interface Ethernet 0), use the **show running-config** or **show startup-config** commands. The **autosense**, **bandwidth**, **fullduplex**, **halfduplex**, **ip**, and **shutdown** commands are listed separately in this command reference.

Examples

The following example configures an attribute of GSS interface Ethernet 0 with a single CLI command.

```
Host(config)# interface eth0 half-duplex
```

An interface can be configured in a sequence of CLI commands as follows.

```
Host(config)# interface eth0
```

```
Host(config-eth0)# half-duplex
Host(config-eth0)# exit
Host(config)#
```

Related Commands

show interface

show running-config

show startup-config

ip

To change initial network device Internet Protocol configuration settings, use the **ip** global configuration command. To delete or disable these settings, use the **no** form of this command.

ip {default-gateway *ip-address* | **domain-name** *name* | **name-server** *ip-addresses* | **route** *destination_address netmask gateway*}

Syntax Description

default-gateway	Specifies the default gateway (if not routing IP).
ip-address	IP address of default gateway.
domain-name	Specifies the domain name.
name	Domain name.
name-server	Specifies the address of the name server.
ip-addresses	IP addresses of name servers (up to a maximum of 8).
route	Specifies the net route.
destination_address	Destination route address.
netmask	Netmask.
gateway	Gateway address.

Defaults

No default behavior or values

Command Modes

Global configuration

Usage Guidelines

To define a default gateway, use the **ip default-gateway** global configuration command. To delete the IP default gateway, use the **no** form of this command. The GSS uses the default gateway to route IP packets when there is no specific route found to the destination.

To define a default domain name, use the **ip domain-name** global configuration command. To remove the IP default domain name, use the **no** form of this command. The GSS appends the configured domain name to any host name that does not contain a domain name. The appended name is resolved by the DNS server and then added to the host table. The GSS must have at least one domain name server specified for the host name resolution to work correctly.

To specify the address of one or more name servers to use for name and address resolution, use the **ip name-server** global configuration command. You can specify up to eight name servers for the GSS device. To disable IP name servers, use the **no** form of this command.

To configure static IP routing, use the **ip route** global configuration command. To disable an IP routing, use the **no** form of this command.

Use the **ip route** command to add a specific static route for a network host. Any IP packet designated for the specified host uses the configured route.

Examples

```
Host(config)# ip default-gateway 192.168.7.18
```

```
Host(config)# no ip default-gateway
Host(config)# ip route 172.16.227.128 172.16.227.250
Host(config)# no ip route 172.16.227.128 172.16.227.250
Host(config)# ip domain-name cisco.com
Host(config)# no ip domain-name
Host(config)# ip name-server 10.11.12.13
Host(config)# no ip name-server 10.11.12.14
```

Related Commands **show ip routes**

ip address

To configure the IP address of a GSS device network interface, use the **ip address** interface configuration command. To disable a specific network address, use the **no** form of this command.

ip address {*ip-address ip-subnet*}

no ip address {*ip-address ip-subnet***}**

Syntax Description

ip-address	IP address.
ip-subnet	IP subnet mask.

Defaults

No default behavior or values

Command Modes

Interface configuration

Usage Guidelines

Use this command to set or change the IP address and subnet mask of the GSS network interfaces.

The **ip address** interface configuration command allows configuration of secondary IP addresses for a specified interface as follows.

```
Host(config)# interface eth0
Host(config-eth0)#ip address ip-address ip-subnet
```

The same IP address cannot be assigned to more than one interface. The following command configures the IP address for the GSS communications interface.

```
Host(config-eth0)# ip address ip-address ip-subnet gss-communications
```

Use the **no** form of the command to disable a specific IP address.

```
Host(config-eth0)# no ip address ip-address ip-subnet
```

Note No two interfaces can have IP addresses in the same subnet.

Examples

```
Host(config-eth0)# ip address 10.10.10.10 255.0.0.0

Host(config-eth0)# no ip address
```

lls

To view a long list of directory names, use the **lls** user EXEC, privileged EXEC, and global configuration command.

lls [*directory*]

Syntax Description

directory	(Optional) Name of the directory for which you want a long list of files.

Defaults

No default behavior or values

Command Modes

User EXEC, privileged EXEC, and global configuration

Usage Guidelines

This command provides detailed information about files and subdirectories stored in the present working directory (including size, date, time of creation, sysfs name, and long name of the file). The **dir** command can also be used to perform the same function.

Examples

```
Host# lls
total 97684
-rw-r--r--    1 root     root           39 Mar  8 21:04 JVM_EXIT_CODE
-rw-r--r--    1 root     root     99706921 Mar  7 15:33 MERLOT.upg
-rw-r--r--    1 root     root            9 Mar 14 21:23 RUNMODE
-rw-r--r--    1 root     root        33427 Mar 14 21:23 gss.log
drwxr-xr-x    2 root     root         4096 Mar  7 16:22 admin
drwxr-xr-x    3 root     root         4096 Mar  7 18:05 apache
-rw-r--r--    1 root     root          117 Mar  7 18:05 audit.log
srwxr-xr-x    1 root     root            0 Mar  7 15:40 cli_config
srwxr-xr-x    1 root     root            0 Mar  7 15:40 cli_exec
drwxr-xr-x   14 root     root         4096 Mar  7 18:05 core-files
-rw-r--r--    1 root     root           61 Mar 14 21:23 datafeed.cfg
srwxrwxrwx    1 root     root            0 Mar  7 15:40 dataserver-socket
-rw-r--r--    1 root     root           18 Mar  7 15:39 nicinfo.cfg
-rw-r--r--    1 root     root         5072 Mar  7 18:05 node.state
drwxrwxrwx    2 root     root         4096 Mar  8 21:04 pid
-rw-rw-rw-    1 root     root         9127 Mar 14 21:23 props.cfg
-rw-r--r--    1 root     root           63 Mar 14 21:23 runmode-comment
-rw-r--r--    1 root     root          553 Mar  8 21:02 running.cfg
drwxr-xr-x    4 root     root         4096 Mar  8 18:34 squid
-rw-r--r--    1 root     root           49 Mar  7 18:05 sysMessages.log
drwxr-xr-x    2 root     root         4096 Mar  7 15:40 sysmsg
drwxrwxrwx    2 root     root         4096 Mar  8 21:02 sysout
-rw-r--r--    1 root     root        41652 Mar 14 21:23 system.log
```

Related Commands

dir

ls

lsof

logging

To configure system logging on your GSS device, use the **logging** global configuration command. To disable logging functions, use the **no** form of this command.

logging {**disk** {**enable | priority** *loglevel* | **subsystem** *name* **priority** *loglevel***} | host** {**enable** | **ip** *ip_addresses*| **priority** *loglevel* | **subsystem** *name* **priority** *loglevel*}}

no logging {**disk** {**enable | priority** *loglevel* | **subsystem** *name* **priority** *loglevel***} | host** {**enable** | **ip** *ip_addresses*| **priority** *loglevel* | **subsystem** *name* **priority** *loglevel*}}

Syntax Description

disk	Sets log to disk file.
enable	Enables log to disk or host.
priority	Sets which priority level messages to log.
loglevel	Identifies the threshold that system messages must meet in order to be logged. Messages with lower priorities than the loglevel specified will not be logged. Use one of the following keywords when selecting the loglevel:
• **alerts**	Immediate action needed. Priority 1.
• **critical**	Immediate action needed. Priority 2.
• **debugging**	Debugging messages. Priority 7.
• **emergencies**	System is unusable. Priority 0.
• **errors**	Error conditions. Priority 3.
• **informational**	Informational messages. Priority 6.
• **notifications**	Normal but significant conditions. Priority 5.
• **warnings**	Warning conditions. Priority 4.
subsystem	Sets the log for a named GSS subsystem. Each subsystem can have a different log level applied for its messages.
name	Name of the GSS subsystem. Use one of the following keywords:
• **crm**	Global Site Selector Manager (GSSM) logging messages.
• **crdirector**	CrDirector logging messages.
• **keepalive**	KeepAlive engine logging messages.
• **nodemgr**	Node manager logging messages.
• **dnsserver**	Domain Name System (DNS) logging messages.
• **system**	System logging messages.
host	Sets log to a remote host machine.
ip	Sets the remote host or hosts that will receive GSS log files.
ip_addresses	Address or addresses of the remote logging hosts.

Defaults

Logging: enabled

Priority of message for console: [?]

Priority of message for file: [?]

Log filename: /...syslog.txt

Log file recycle size: [?] bytes

Command Modes Global configuration

Usage Guidelines Use this command to set specific parameters of the system log file. Decisions about what level of logging to use can be made globally, or configured on a subsystem-by-subsystem basis. For example, you could configure the Global Site Selector Manager (GSSM) to log all error-level messages, but the node manager (nodemgr) to log a larger set of all notice-level messages.

To configure the GSS to send varying levels of event messages to an external syslog host, use the **logging host subsystem** option. Logging can be configured to send various levels of messages to disk using the **logging disk subsystem** option.

Examples

```
Host(config)# logging disk priority error
Host(config)# logging host 10.1.2.3 priority notice

Host(config)# logging disk subsystem crdirector priority information
Host(config)# logging host subsystem kale priority error

Host(config)# no logging disk priority error
```

Related Commands **show logging**

ls

To view a list of files or subdirectory names within a directory, use the **ls** user EXEC, privileged EXEC, and global configuration command.

ls [*directory*]

Syntax Description

directory	(Optional) Name of the directory for which you want a list of files.

Defaults

No default behavior or values

Command Modes

User EXEC, privileged EXEC, and global configuration

Usage Guidelines

To list the filenames and subdirectories within a particular directory, use the **ls** *directory* command; to list the filenames and subdirectories of the current working directory, use the **ls** command. To view the present working directory, use the **pwd** command.

Examples

```
Host# ls
admin
cli_exec
dump
http-users
merlot.log
pid
squid
system.log
node.state
running.cfg
sysout
trace.log
```

Related Commands

dir

lls

lsof

pwd

lsof

To view a list of all open files on your GSS device, use the **lsof** EXEC command.

lsof

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

To list the names, file properties, and locations of all files that are currently open on your GSS device, use the **lsof** command.

Examples

```
Host# lsof

COMMAND     PID     USER   FD   TYPE     DEVICE     SIZE      NODE NAME
init          1     root  cwd    DIR        8,7     4096         2 /
init          1     root  rtd    DIR        8,7     4096         2 /
init          1     root  txt    REG        8,7    25968       492 /sbin/init
init          1     root  mem    REG        8,7   341331        29 /lib/ld-2.1.3.so
init          1     root  mem    REG        8,7  4105868        36 /lib/libc-2.1.3.so
init          1     root    0u  unix 0xf7f86f40              5851 socket
init          1     root   10u  FIFO        8,8              4098 /rw/dev/initctl
kflushd       2     root  cwd    DIR        8,7     4096         2 /
kflushd       2     root  rtd    DIR        8,7     4096         2 /
kflushd       2     root    0u  unix 0xf7f86f40              5851 socket
kflushd       2     root   10u  FIFO        8,8              4098 /rw/dev/initctl
kupdate       3     root  cwd    DIR        8,7     4096         2 /
kupdate       3     root  rtd    DIR        8,7     4096         2 /
kupdate       3     root    0u  unix 0xf7f86f40              5851 socket
kupdate       3     root   10u  FIFO        8,8              4098 /rw/dev/initctl
kswapd        4     root  cwd    DIR        8,7     4096         2 /
kswapd        4     root  rtd    DIR        8,7     4096         2 /
kswapd        4     root    0u  unix 0xf7f86f40              5851 socket
kswapd        4     root   10u  FIFO        8,8              4098 /rw/dev/initctl
keventd       5     root  cwd    DIR        8,7     4096         2 /
keventd       5     root  rtd    DIR        8,7     4096         2 /
keventd       5     root    0u  unix 0xf7f86f40              5851 socket
keventd       5     root   10u  FIFO        8,8              4098 /rw/dev/initctl
...
```

Related Commands

dir

ls

lls

pwd

no

To undo a global configuration command or set its defaults, use the **no** form of a global configuration command to undo the original command.

no *command*

Syntax Description

access-group	Assigns access lists to GSS ethernet interfaces.
access-list	Creates GSS access lists.
autosense	Enables a GSS interface to automatically select the correct mode for communicating with another device.
bandwidth	Configures bandwidth for a GSS interface.
copy	Copies GSS configuration information or technical support information to and from a disk.
exec-timeout	Sets the CLI session timeout in minutes.
ftp	Enables File Transfer Protocol (FTP) on a GSS device.
fullduplex	Configures a GSS device for full-duplex data transfers.
gss-communications	Configures the interface for commmunication between GSS devices.
gss-tcp-keepalives	Configures the interface for use receiving TCP keepalive information.
halfduplex	Configures a GSS device for half-duplex data transfers.
help	Provides assistance for using CLI commands.
hostname	Configures the system's network name.
interface	Configures a GSS Ethernet interface.
ip	Changes the configuration of Internet Protocol (IP) on the GSS device.
logging	Configures system logging (syslog).
ntp-server	Configures the Network Time Protocol source
property	Sets GSS configuration properties.
show	Displays running system configuration information.
ssh	Enables Secure Shell (SSH) on the GSS device.
telnet	Enables Telnet operations on the GSS device.
terminal-length	Sets the number of rows of GSS output displayed ona console.
username	Configures username authentication on the GSS device.
write	Copies the current GSS running configuration as the new device startup configuration.

Defaults

No default behavior or values

Command Modes

Interface configuration, global configuration

Usage Guidelines

Use the **no** command to disable functions or negate a command. If you need to negate a specific command, such as the default gateway IP address, you must include the specific string in your command, such as **no ip default-gateway** *ip-address*.

Examples

```
Host(config)# no ip name-server 10.11.12.14

Host(config)# no ntp server 172.16.22.44
```

ntp-server

To configure the Network Time Protocol (NTP) and to allow the system clock to be synchronized by a time server, use the **ntp-server** global configuration command. To disable this function, use the **no** form of this command.

ntp-server {*hostname* | *ip-address*}

no ntp-server {*hostname* | *ip-address*}

Syntax Description

hostname	Host name of the time server providing the clock synchronization (maximum of 4).
ip-address	IP address of the time server providing the clock synchronization (maximum of 4).

Defaults

The default NTP version number is 3.

Command Modes

Global configuration

Usage Guidelines

Use this command to synchronize the GSS clock with the specified Network Time Protocol server. When specifying more than one server, separate the ntp server addresses using spaces.

Examples

```
Host(config)# ntp-server 161.16.22.44 161.100.10.17
Host(config)# no ntp-server 161.16.22.44
```

Related Commands

clock

show clock

show ntp status

ping

To send ICMP echo packets for diagnosing basic network connectivity on networks, use the **ping** EXEC command.

ping {*hostname* | *ip-address*}

Syntax Description

hostname	Host name of system to ping.
ip-address	IP address of system to ping.

Defaults

No default behavior or values

Command Modes

User and privileged EXEC

Usage Guidelines

To use this command with the *hostname* argument, be sure that the DNS functionality is configured on your GSS. To force the timeout of a nonresponsive host, or to eliminate a loop cycle, press **Ctrl-C**.

Examples

```
Host# ping gss.cisco.com
PING 172.66.0.0 (172.66.0.0) from 10.1.13.5 : 56(84) bytes of data.
64 bytes from gss.cisco.com (172.66.0.0): icmp_seq=0 ttl=35 time=57.3 ms
64 bytes from gss.cisco.com (172.66.0.0): icmp_seq=1 ttl=35 time=55.8 ms
64 bytes from gss.cisco.com (172.66.0.0): icmp_seq=2 ttl=35 time=55.5 ms
64 bytes from gss.cisco.com (172.66.0.0): icmp_seq=3 ttl=35 time=57.6 ms
64 bytes from gss.cisco.com (172.66.0.0): icmp_seq=4 ttl=35 time=55.3 ms
```

property

To manually adjust a system configuration property for your GSS network, use the **property** global configuration command.

property set *property_name property_value*

Syntax Description

set	Sets the GSS system configuration property
property_name	The name of the property you are manually setting; consult with a Cisco Technical Assistance Center representative for information about a property if you are not sure of its purpose
property_value	The new property setting

Defaults

No default behavior or values

Command Modes

Global configuration

Usage Guidelines

The **property** command should only be used under the direct supervision of a Cisco Technical Support representative. Modifying system configuration properties can cause GSS devices to restart, or require the GSSM to be manually restarted. In addition, modifying a system configuration property, if done improperly, may adversely affect your GSS network.

Examples

```
Host(config)# property set Gui.Session.Timeout 10
```

pwd

To view the present working directory, use the **pwd** EXEC command.

pwd

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Command Modes EXEC

Usage Guidelines Use this command to display the present working directory of the GSS.

Examples

```
Host# pwd
/admin
```

Related Commands

cd

dir

lls

ls

reload

To halt and perform a cold restart on your GSS device, use the **reload** EXEC command.

reload

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Command Modes Privileged EXEC

Usage Guidelines To reboot the GSS device, use the **reload** command. If no configurations are saved to Flash memory, you are prompted to enter configuration parameters upon restart. Any open connections are dropped after you issue this command.

Examples

```
Host# reload
```

Related Commands **write**

restore-factory-defaults

To reset your GSS device to its initial state, restoring all factory default settings, use the **restore-factory-defaults** command.

restore-factory-defaults

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

Should your GSS device be improperly configured or otherwise malfunctioning, the **restore-factory-defaults** command can be used to restore the device to its initial state, allowing you to properly configure it for use on your network.

The **restore-factory-defaults** command will erase your GSSM database and all of its data and reset all network settings, returning your GSS hardware to the same state it was in when it first arrived from the factory. Make sure you have backed up any vital data before executing the **restore-factory-defaults** command.

Examples

```
Host# restore-factory-defaults
```

Related Commands

restore

rotate-logs

To force the GSS device to restart its log files and rotate out the existing log files, use the **rotate-logs** command, for example:

rotate-logs

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Usage Guidelines This command forces the GSS device to save archive copies of all existing log files and replace them with fresh log files. Existing log files are archived locally using the following naming convention:

logfile_name.log.*~number~*

where *logfile_name*.log is name of the archived log file, for example: *gss.log* or *kale.log*, and ~number~ is an incremented number representing the number of times the logs have been rotated. For example, ~3~.

Command Modes Privileged EXEC

Examples

```
Host# rotate-logs
```

Related Commands **logging**

scp

To securely copy files from a GSS device that you are logged on to, use the **scp** command in EXEC mode.

scp {*source_path* **[***source_filename***]** *user***@***target_host***:***target_path***}**

To securely copy files from another device to a GSS device you are logged in to, use the **scp** command in EXEC mode.

scp {*user***@***source_host***:/***source_path***[***source_filename***]** *target_path***}**

Syntax Description

source_path	Relative directory path and file name on the source device of the file that is being transferred.
source_filename	Name of the file to be copied.
user@target_host	Login account name and host name for the device to which you are copying files.
target_path	Relative directory path on the target device to which the file is being copied.
user@source_host	Login account name and host name for the device from which you are copying files.

Defaults

No default behavior or values

Command Modes

EXEC

Usage Guidelines

After logging in to the CLI for either the device from which or to which you will be copying, enter the **scp** command, following the syntax description provided above. You may be prompted to log in to the remote device before you are allowed to navigate to the target directory.

Examples

```
Host> scp /tmp/system.log 10.1.2.3:/cisco/state/dump/home
Host> scp 10.0.0.0:/cisco/state/mygssmfile.log /cisco/state/dump/home
```

Related Commands

ftp

show access-group

To display a list of the access-lists associated with your GSS interfaces, use the **show access-group** Global configuration command.

show access-group

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Command Modes Global configuration

Usage Guidelines The **show access-group** command displays a list of which access lists are attached to each of your two GSS interfaces, eth0 and eth1.

Examples

```
Host(config)#show access-group
```

Related Commands

access-group

access-list

show access-list

show access-list

To display a list of the access-lists configured on your GSS device, use the **show access-list** global configuration command.

show access-list

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Global configuration

Usage Guidelines

The **show access-list** command displays a list of access lists on your GSS device, regardless of whether they are being used or not. Access lists must beapplied to a particular GSS interface before they can be used to filter GSS traffic.

Examples

```
Host(config)#show access-list
access-list:alist1
access-list alist1 permit tcp any destination-port eq 80
access-list alist1 deny tcp host 192.168.1.101
```

Related Commands

access-group

access-list

show access-group

show clock

To display the system clock, use the **show clock** EXEC command.

show clock

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

EXEC

Examples

The following example shows date and time information, such as day of the week, month, time (hh:mm:ss), and year in Greenwich mean time (GMT).

```
Host# show clock
System time: Wed Apr 28 20:52:48 2002 GMT
```

Related Commands

clock

show ftp

To display the status of FTP on your GSS device, use the **show ftp** EXEC command.

show ftp

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Usage Guidelines

This command only displays the operating status of FTP and cannot be used to transfer files to or from the GSS device.

Command Modes

EXEC

Examples

In the following example, the **show ftp** command displays that FTP is enabled.

```
Host# show ftp
ftp is disabled
```

Related Commands

ftp

show telnet

show ssh

show interface

To display hardware interface information, use the **show interface** EXEC command.

show interface ethernet {eth**0** | **eth1**}

Syntax Description

eth0	First Ethernet interface (eth0) on your GSS device.
eth1	Second Ethernet interface (eth1) on your GSS device.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Examples

```
Host# show interface eth0
Interface eth0
   ip address 161.10.10.10 255.255.255.0
   gss-communications
   autosense

Interface Diagnostic output
   Basic registers of MII PHY #1:  3000 782d 02a8 0154 05e1 40a1 0003 0000.
    Basic mode control register 0x3000: Auto-negotiation enabled.
    You have link beat, and everything is working OK.
    Your link partner advertised 40a1: 100baseTx 10baseT.

Interface statistics
   eth0      Link encap:Ethernet  HWaddr 00:08:A3:4D:74:12
             inet addr:161.10.10.10 Bcast:161.10.10.255  Mask:255.255.255.0
             UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
             RX packets:187837 errors:0 dropped:0 overruns:0 frame:0
             TX packets:98285 errors:0 dropped:0 overruns:0 carrier:0
             collisions:0 txqueuelen:100
             Interrupt:9 Base address:0x7400
```

Related Commands

interface

show running-config

show ip routes

To display the IP routing table, use the **show ip routes** EXEC command.

show ip routes

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Command Modes Privileged EXEC

Examples

```
Host# show ip routes

Kernel IP routing table
   Destination     Gateway         Genmask         Flags Metric Ref    Use Iface
   172.16.175.0    0.0.0.0         255.255.255.0   U     0      0        0 eth0
   10.0.0.0       0.0.0.0         255.0.0.0       U     0      0        0 lo
   0.0.0.0         172.16.175.1    0.0.0.0         UG    0      0        0 eth0
```

Related Commands **ip route**

show logging

To display the system message log configuration, use the **show logging** EXEC command.

show logging

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Examples

```
Host# show logging

Logging to disk is enabled.
Priority for disk logging is Informational(6).


Logging to host is disabled.
Priority for host logging is Warning(4).
```

Related Commands

log

logging

show logs

To send the log activity to your current session, use the **show log** EXEC command.

show logs {follow | tail}

Syntax Description

follow	Displays the log file as data is appended to it.
tail	Displays only the last 10 lines of the log file.

Command Modes

Privileged EXEC

Usage Guidelines

Use the **show logs** command to send the log activity to your current session. The **show logs** command displays the contents of the *gss.log* file, which contains information on GSS activity that is most useful to GSS administrators.

Examples

To send the GSS log activity to your current session, enter:

```
Host# show logs
gss.log
Jul 10 17:11:43 gss1-css SYS-6-GSS-CTRL[3565] Terminating GSS
Jul 10 17:11:43 gss1-css SYS-7-LIB-FILE[3566] Wrote '/cisco/merlot/state/CONTROL'
Jul 10 17:11:43 gss1-css SYS-7-LIB-UTIL[3568] Sending kill to nm-notifier pid: 3466
Jul 10 17:11:45 gss1-css NMR-6-NODEMGR[2565] Processing control command.
Jul 10 17:11:45 gss1-css NMR-6-NODEMGR[2565] NM Received terminate command.
Jul 10 17:11:45 gss1-css NMR-5-NODEMGR[2565] stopping all servers
Jul 10 17:11:45 gss1-css NMR-6-NODEMGR[2565] Stopping runmode 5 processes
Jul 10 17:11:45 gss1-css NMR-6-NODEMGR[2565] Stopping: keepalive using external kill
Jul 10 17:11:45 gss1-css NMR-6-NODEMGR[2565] stopping dnsserver Using pe.destroy
Jul 10 17:11:45 gss1-css CRD-4-SELECTORCOMMERREOF[2772] EOF
Jul 10 17:11:45 gss1-css CRD-6-SERVERSTATUSCHG[2772] server Selector changes status from
Started to 4
Jul 10 17:11:45 gss1-css NMR-6-NODEMGR[2565] stopping boomerang Using pe.destroy
Jul 10 17:11:46 gss1-css CRD-4-KALECOMMERREOF[2772] EOF
Jul 10 17:11:46 gss1-css CRD-6-SERVERSTATUSCHG[2772] server KALE changes status from
Started to 4
Jul 10 17:11:47 gss1-css NMR-6-NODEMGR[2565] Runmode 5 servers stopped successfully.
Jul 10 17:11:47 gss1-css NMR-6-NODEMGR[2565] Stopping runmode 3 processes
Jul 10 17:11:47 gss1-css NMR-6-NODEMGR[2565] Stopping: crm using external kill
Jul 10 17:11:48 gss1-css EXTERNAL-6-NONE[3595] Sending command server.stop IController
Jul 10 17:11:49 gss1-css CRM-5-ASERVEXIT[2737] Shutting down with exit code ExitStop while
processing command from '161.44.174.7
7'
Jul 10 17:11:49 gss1-css NMR-6-NODEMGR[2565] Stopping: crdirector using external kill
Jul 10 17:11:50 gss1-css NMR-6-NODEMGR[2565] stopping tomcat Using pe.destroy
Jul 10 17:11:50 gss1-css NMR-6-NODEMGR[2565] Stopping: apache using external kill...
```

Related Commands

logging

show logging

show memory

To display memory blocks and statistics, use the **show memory** EXEC command.

show memory

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Examples

```
Host# show memory
                 total:    used:    free:  shared: buffers:  cached:
Mem:  1073311744 79802368 993509376        0 10178560 22958080
Swap: 268414976        0 268414976
MemTotal:   1048156 kB
MemFree:     970224 kB
MemShared:        0 kB
Buffers:       9940 kB
Cached:       22420 kB
BigTotal:    131072 kB
BigFree:     114784 kB
SwapTotal:   262124 kB
SwapFree:    262124 kB
```

show ntp

To display the network time protocol (NTP) configuration, use the **show ntp** EXEC command.

show ntp

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Command Modes User EXEC

Examples

```
Host# show ntp
161.44.11.18
161.100.9.14
```

Related Commands **ntp**

show processes

To display a list of GSS processes, use the **show processes** EXEC command.

show processes

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Examples

```
Host# show processes
NAME             PID    MEM CPUTIME  START
----             ---    --- -------  -----
system             814  0.3 00:00:00 Mar19
postgresql        1068  0.4 00:00:00 Mar19
tomcat           31045  2.0 00:00:01 Mar20
apache            1321  0.1 00:00:00 Mar19
controller        1072  2.3 00:00:07 Mar19
CrDirector        1084  1.7 00:00:03 Mar19
selector          1536  0.1 00:00:00 Mar19
kale              1543  0.1 00:00:00 Mar19
nodemgr            932  1.7 00:00:02 Mar19

init                 1  0.0 00:00:10 Mar19
kflushd              2  0.0 00:00:00 Mar19
kupdate              3  0.0 00:00:00 Mar19
kswapd               4  0.0 00:00:00 Mar19
keventd              5  0.0 00:00:00 Mar19
mdrecoveryd          6  0.0 00:00:00 Mar19
syslogd            286  0.0 00:00:02 Mar19
klogd              295  0.0 00:00:00 Mar19
crond              495  0.0 00:00:00 Mar19
xntpd              655  0.1 00:00:00 Mar19
sshd               720  0.0 00:00:06 Mar19
run-merlot         814  0.3 00:00:00 Mar19
mingetty           835  0.0 00:00:00 Mar19
mingetty           836  0.0 00:00:00 Mar19
getty              837  0.0 00:00:00 Mar19
getty              838  0.0 00:00:00 Mar19
parser_server      839  0.3 00:00:00 Mar19
dataserver         840  0.0 00:00:00 Mar19
java               932  1.7 00:00:02 Mar19
...
```

show properties

To display a list of configuration property settings for the GSS device, use the **show properties** Privileged EXEC command.

show properties

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Examples

```
Host# show properties
logger.default.LocalThreshold                    : 7   [default=6]
ApacheUseNonSecure                               : 0
DataFeed.persistRate                             : 600
DisableJIT                                       : 0
Gui.Session.Timeout                              : 120
LogRotateEntry0                                  : /cisco/merlot/state/gss.log {
LogRotateEntry1                                  : /cisco/merlot/state/audit.log {
LogRotateEntry10                                 : /cisco/merlot/state/system.log {
LogRotateEntry11                                : /cisco/merlot/state/cdmAuditTrail.log
{
LogRotateEntry2                                  : /cisco/merlot/state/trace.log {
LogRotateEntry3                                  : /cisco/merlot/state/sysMessages.log {
LogRotateEntry4                                  : /cisco/merlot/state/sysout/*.log {
LogRotateEntry5                                  : /cisco/merlot/state/apache/log/*_log
{
LogRotateEntry6                                  : /cisco/merlot/state/tomcat/log/*.log
{
LogRotateEntry7                                  : /cisco/merlot/state/snmpd/snmpd.log {
LogRotateEntry8                                  : /cisco/merlot/state/snmpd/snmpd.jnk {
LogRotateEntry9                                  :
/cisco/merlot/state/snmpd/ucd-snmpd.log {
Messenger.messageBinMax                          : 100
Messenger.sendRate                               : 30000
NodeMgr.DisableNodeRestart                       : 0
NodeMgr.DisabledRebootSleepTime                  : 30
NodeMgr.MerlotStopKillTimeout                    : 12
NodeMgr.ProcessStopKillTimeout                   : 10
NodeMgr.RmiCommandTimeout                        : 15
NodeMgr.enableFailureReboot                      : 0
NodeMgr.healthCheckInitWaitSec                   : 300
...
```

Related Commands

property

show running-config

To display the current running configuration information on the terminal, use the **show running-config** EXEC command. This command replaces the **write terminal** command.

show running-config

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

Use this command in conjunction with the **show startup-config** command to compare the information in running memory to the startup configuration used during bootup.

Examples

```
Host# show running-config
interface eth0
   ip address 10.1.2.46 255.255.255.0
   gss-communications
   hostname gss1.cisco.com
   ip default-gateway 10.1.2.1
   ip name-server 161.31.102.3
   gssm database create
   gssm enable-primary
   ssh enable
   telnet enable
```

Related Commands

configure

copy running-config

copy startup-config

show ssh

To display Secure Shell (SSH) status and configuration information, use the **show ssh** EXEC command.

show ssh

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Command Modes User EXEC

Examples

```
Host# show ssh
ssh is enabled
```

Related Commands **ssh**

show startup-config

To display the startup configuration, use the **show startup-config** EXEC command.

show startup-config

Syntax Description

This command has no keywords or arguments.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

Use this command to display the configuration used during an initial bootup, stored in nonvolatile random-access memory (NVRAM).

Examples

```
Host# show startup-config
interface eth0
   ip address 10.1.2.3 255.255.255.0
   gss-communications
   hostname atcr1.cisco.com
   ip default-gateway 10.1.2.1
   ip name-server 172.31.101.9
   gssm database create
   gssm enable-primary
   ssh enable
   telnet enable
```

Related Commands

configure

copy running-config

show running-config

show statistics

To display GSS load balancing statistics, use the **show statistics** EXEC command.

show statistics {boomerang {domain *domain_name* **| global } | dns {answer-group {list |** *group_name* **[verbose]} | domain {list |** *domain_name* **[verbose]}| domain-group {list |** *domain_group_name* **[verbose]}| global | rule {list |** *rule_name* **[verbose]}| source-address-group {list |** *source-address_group_name* **[verbose]}} | keepalive {all | cra {***IP_address* **| list}| global | http-head {***IP_address* **| list} | icmp {***IP_address* **| list} | kalap {***IP_address* **| list} | ns {***IP_address* **| list}}}**

Syntax Description

statistics	Displays GSS statistics
boomerang	Displays statistics related to the Boomerange Server component of the GSS
domain	Displays statistics of the type specified related to the named domain which is being served by the GSS
domain_name	Name of the domain
global	Displays statistics across the entire GSS network, or for all resources of the type named currently configured on the GSS
dns	Displays statistics from the domain name server (DNS) component of the GSS
answer-group	Displays DNS statistics for a named answer group, including the IP address, hit count, and operating status of member devices
list	Lists statistics for all resources of the type specified
group_name	Name of the answer group for which statistics will be displayed
domain-group	Displays DNS statistics for the GSS domain group specified
domain_group_name	Displays statistics for a named GSS domain group, including the hit count and success count
rule	Displays statistics for GSS DNS rules
rule_name	Name of the DNS Rule for which statistics will be displayed
source-address-group	Displays statistics for a GSS source address group such as the hit count for all addresses in the list
sa_group_name	Name of the source address group, containing source address lists for which statistics will be displayed
verbose	Displays statistics broken out for each contituent part of the named DNS Rule element, for example: each domain that makes up a Domain List.
keepalive	Displays statistics for the KeepAlive Engine (KALE) component of the GSS
all	Displays statistics for all configured keepalive types managed by the KALE.
cra	Displays statistics for configured Content Routing Agent (CRA) keepalive types managed by the KALE and used with Boomerang-type answers
http-head	Displays statistics for configured http-head keepalive types managed by the KALE and used with VIP-type answers
icmp	Displays statistics for configured icmp keepalive types managed by the KALE and used with VIP-type answers

kalap	Displays statistics for configured kalap keepalive types managed by the KALE and used with VIP-type answers
ns	Displays statistics for configured name server (ns) keepalive types managed by the KALE and used with name server type answers

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Usage Guidelines

Use the show **show statistics** command to display content routing and load balancing statistics for each component of your GSS global server load balancing operation: Boomerang (CRAs), DNS, and KeepAlives. The **show statistics** command is used to gauge DNS traffic to and from your GSS device, as well as report on the status of GSS devices across your network, and on the success of the device in matching incoming DNS requests to Answers on the GSS network. For example, the **show statisics** command can be used to view the traffic handled by a particular DNS rule, which maches D-proxies to Answers, or to analyze the traffic to a particular hosted domain being managed by the GSS.

When viewing DNS statistics, the *verbose* option allows you to view detailed statistics on each component of your DNS Rules, for example: statistics for each Answer that makes up an Answer Group, or each domain that makes up a Domain Group.

Examples

```
Host# show statistics dns answer-group ChrisAGWizard
totalHitCount=0
Host# show statistics dns answer-group ChrisAGWizard verbose
totalHitCount=0
     id          addr       hitCount   status
-----------------------------------------------
    183        10.0.0.0     0       down
    185        10.1.0.0     0       down
    181        10.2.0.0     0       down

Host# show statistics rule ChrisRR
totalHitCount=0, totalSuccessCount=0
Clause 0   hitCount=0  successCount=0
     id          address       hitCount
----------------------------------------
     70          10.222.0.0    0
     80         10.223.0.0     12
     74          10.224.0.0    0

Host# show statistics global
BMASDnsQueriesRcvd         =9
BMASDnsHostAddrQueriesRcvd =6
BMASDnsResponsesSent       =2
BMASDnsReponsesNoError     =2
BMASDnsResponsesErrors     =0
BMASDnsQueriesUnmatched    =7
BMASDnsDrops               =0
BMASDnsNSFWDSent           =0
BMASDnsBoomServReqSent     =0
BMASDnsNSFWDResponsesRcvd  =0
```

```
BMASDnsReqRatePerSecondCur =0
BMASDnsReqRatePerSecondPeak=0

Host# show statistics domain-group foo-new
totalHitCount=0
         DomainName           HitCount
----------------------------------------
         www.foo.com             0
         gif.foo.com             0
       www.cdn.foo.com           0
```

Related Commands

clear

show logs

show system-status

show system-status

To display a report on the current operating status of your GSS device, including the online status, current software version used, as well as memory and cpu usage for each of the GSS components, use the **show system-status** EXEC command.

show system-status

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC

Examples

```
Host#show system-status
Cisco GSS(1.0.0.22.3) GSS Manager - primary [Mon Jul 22 16:56:37 UTC 2002]

Normal Operation [runmode = 5]

%CPU %MEM START   PID SERVER
 0.0  0.3 Jul10   900           system
 0.0  0.4 Jul10  1170         database
 0.0  1.9 Jul10  1175           tomcat
 0.0  0.1 Jul10  1459           apache
 0.0  2.3 Jul10  1184              crm
 0.0  1.8 Jul10  1216       crdirector
 0.0  0.1 Jul10  1201        dnsserver
 0.0  0.1 Jul10  1240        keepalive
 0.0  0.1 Jul10  1220        boomerang
 0.0  2.4 Jul10  1035          nodemgr
 0.0  0.0 Jul10   419          syslogd
 ---  ---   ---   ---        ucd-snmpd [DISABLED]
```

Related Commands

gss status

gssm database status

gssm database report

show tech-support

To display a report on the current operating status of your GSS device that can be used by Cisco technical support representatives to help troubleshoot problems on your GSS network, use the **show tech-support** Privileged EXEC command.

show tech-support

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC, global configuration

Examples

```
Host(config)#show tech-support
Cisco GSS(1.0.0.22.3) GSS Manager - primary [Mon Jul 22 16:58:30 UTC 2002]
Normal Operation [runmode = 5]

%CPU %MEM START   PID SERVER
 0.0  0.3 Jul10   900           system
 0.0  0.4 Jul10  1170         database
 0.0  1.9 Jul10  1175           tomcat
 0.0  0.1 Jul10  1459           apache
 0.0  2.3 Jul10  1184              crm
 0.0  1.8 Jul10  1216       crdirector
 0.0  0.1 Jul10  1201        dnsserver
 0.0  0.1 Jul10  1240        keepalive
 0.0  0.1 Jul10  1220        boomerang
 0.0  2.4 Jul10  1035          nodemgr
 0.0  0.0 Jul10   419          syslogd
 ---  ---   ---   ---        ucd-snmpd [DISABLED]
==> /var/log/messages <==
2002-07-10 16:23:08 relog: Booting...

==> /cisco/merlot/state/acr.log <==

==> /cisco/merlot/state/system.log <==
Jun 15 07:11:40 host-css2 rc: Stopping keytable succeeded
Jun 15 07:11:42 host-css2 inet: inetd shutdown succeeded
Jun 15 07:11:45 host-css2 crond: crond shutdown succeeded
Jun 15 07:11:46 host-css2 dd: 1+0 records in
Jun 15 07:11:46 host-css2 dd: 1+0 records out
Jun 15 07:11:46 host-css2 random: Saving random seed succeeded
Jun 15 07:11:48 host-css2 kernel: Kernel logging (proc) stopped.
Jun 15 07:11:48 host-css2 kernel: Kernel log daemon terminating.
Jun 15 07:11:50 host-css2 syslog: klogd shutdown succeeded
Jun 15 07:11:51 host-css2 exiting on signal 15
==> /cisco/merlot/state/apache/log/error_log <==
...
```

Related Commands

tcpdump

show telnet

To display the status of the Telnet option on your GSS device, use the **show telnet** EXEC command.

show telnet

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Usage Guidelines

This command only displays the operating status of Telnet and cannot be used to connect to remote devices.

Command Modes

User EXEC

Examples

In the following example, the **show telnet** command indicates that Telnet is enabled.

```
Host# show telnet
telnet is enabled
```

Related Commands

telnet

show ftp

show ssh

show terminal-length

To display the terminal length setting for your GSS device, use the **show terminal-length** User EXEC command.

show terminal-length

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Usage Guidelines This command displays the maximum number of rows of data that are output at once during a terminal session.

Command Modes User EXEC

Examples

```
Host# show terminal-length
terminal length 23
```

Related Commands **terminal-length**

show uptime

To find out how long the GSS device has been running, use the **show uptime** EXEC command.

show uptime

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

User EXEC

Examples

In the following example, the **show uptime** command displays how long the GSS device has been running.

```
Host# show uptime
System has been up for 7 Days 5 Hours 22 Minutes
```

show user

To display user information for a particular user, use the **show user** EXEC command.

show user username *name*

Syntax Description

username	Displays username keyword.
name	Username.

Defaults

No default behavior or values

Command Modes

User EXEC

Examples

```
Host# show user username paulr-admin
paulr-admin  admin
```

Related Commands

show users

show users

To display users, use the **show users** EXEC command.

show users

Syntax Description This command has no arguments or keywords.

Defaults No default behavior or values

Command Modes User EXEC

Examples

```
Host# show users
lstar       admin
admin       admin
paulr-admin admin
```

Related Commands **show user**

show version

To display version information about the GSS software, use the **show version** EXEC command.

show version

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

User EXEC

Examples

```
Host# show version
Global Site Selector (GSS)
Copyright (c) 1999-2002 by Cisco Systems, Inc.

Version 1.0(0.22.3)

Compiled Tue Jul  9 16:56:08 2002 by atripath - changeset 25175
uptime is 2 Hours 13 Minutes and 59 seconds
Model Number: GSS-3380-K9
```

shutdown

To shut down the operating system on the GSS device, use the **shutdown** EXEC command. To shut down a particular Ethernet interface on the GSS device use the **shutdown** interface configuration command.

shutdown

Syntax Description

This command has no arguments or keywords.

Defaults

No default behavior or values

Command Modes

Privileged EXEC, interface configuration

Usage Guidelines

The **shutdown** command performs a shutdown of the GSS operating system or interface. In some cases, the GSS device will also be powered down following a shutdown.

Examples

```
Host# shutdown

Host(config)# interface eth0
Host(config-eth0)# shutdown
```

snmp

To enable Simple Network Management Protocol (SNMP) on your GSS device, use the **snmp** command in Global Configuration mode.

snmp enable

Syntax Description

enable	Enables the SNMP protocol on the selected GSS device.

Defaults

No default behavior or values.

Command Modes

Global configuration.

Usage Guidelines

Examples

```
Host(config)# snmp enable
```

Related Commands

ftp

ntp

ssh

telnet

ssh

To enable or disable Secure Shell (SSH) on the GSS device, use the **ssh** command. Use the **no** form of this command to disable SSH.

ssh enable

no ssh enable

Syntax Description

enable	Enables SSH on the GSS device.

Defaults

No default behavior or values

Command Modes

Global configuration

Examples

```
Host(config)# ssh enable
```

Related Commands

telnet

tail

To display the last 10 lines of a file, use the **tail** EXEC command.

tail *filename*

Syntax Description

filename	Name of file.

Defaults

No default behavior or values

Command Modes

EXEC

Usage Guidelines

Use this command to display the end of a file within any GSS file directory. This command may be used to monitor features such as transaction logging or system logging (syslog).

Examples

```
Host# tail system.log
Showing file system.log
Jun 15 07:11:40 host-css2 rc: Stopping keytable succeeded
Jun 15 07:11:42 host-css2 inet: inetd shutdown succeeded
Jun 15 07:11:45 host-css2 crond: crond shutdown succeeded
Jun 15 07:11:46 host-css2 dd: 1+0 records in
Jun 15 07:11:46 host-css2 dd: 1+0 records out
Jun 15 07:11:46 host-css2 random: Saving random seed succeeded
Jun 15 07:11:48 host-css2 kernel: Kernel logging (proc) stopped.
Jun 15 07:11:48 host-css2 kernel: Kernel log daemon terminating.
Jun 15 07:11:50 host-css2 syslog: klogd shutdown succeeded
Jun 15 07:11:51 host-css2 exiting on signal 15
End of file system.log
...
```

Related Commands

dir

lls

ls

lsof

mkfile

type

tcpdump

To output all traffic to and from a particular GSS interface, use the **tcpdump** EXEC command.

tcpdump {eth0 | eth1}

Syntax Description

eth0	Interface Ethernet 0, the first network interface on the Global Site Selector
eth1	Interface eth1, the second network interface on the Global Site Selector

Defaults

No default behavior or values

Command Modes

EXEC

Usage Guidelines

The **tcpdump** command outputs a record of all tcp traffic to and from a named interface to the screen.

Examples

This is an example of the **tcpdump** command and its output.

```
Host# tcpdump eth0
Kernel filter, protocol ALL, datagram packet socket
tcpdump: listening on eth0
19:20:45.678641 > gssm.cisco.com.ssh > 10.1.2.3.1178: P 2126255246:2126255346(100) ack
4828790 win 32680 (DF) [tos 0x10]
19:20:45.680534 > gssm.cisco.com.49165 > gss.cisco.com.domain: 9217+ PTR?
187.0.1.2.in-addr.arpa. (43)
19:20:45.681090 < gss.cisco.com.domain > gssm.cisco.com.49165: 9217 NXDomain* 0/1/0 (111)
19:20:45.681421 > gssm.cisco.com.49165 > gss.cisco.com.domain: 9218+ PTR?
172.13.89.10.in-addr.arpa. (42)
19:20:45.681984 < gss.cisco.com.domain > gssm.cisco.com.49165: 9218* 1/2/2 PTR
gssm.cisco.com. (145)
19:20:45.682396 > gssm.cisco.com.49165 > gss.cisco.com.domain: 9219+ PTR?
172.5.89.10.in-addr.arpa. (41)
19:20:45.682950 < gss.cisco.com.domain > gssm.cisco.com.49165: 9219* 1/2/2 PTR
gss.cisco.com. (142)
19:20:45.683218 > gssm.cisco.com.ssh > 10.1.2.3.1178: P 100:376(276) ack 1 win 32680 (DF)
[tos 0x10]
19:20:45.683568 > gssm.cisco.com.ssh > 10.1.2.3.1178: P 376:748(372) ack 1 win 32680 (DF)
[tos 0x10]
19:20:45.683902 > gssm.cisco.com.ssh > 10.1.2.3.1178: P 748:1120(372) ack 1 win 32680 (DF)
[tos 0x10]
19:20:45.688517 > gssm.cisco.com.ssh > 10.1.2.3.1178: P 1120:1372(252) ack 1 win 32680
(DF) [tos 0x10]
19:20:45.696298 B arp who-has 192.168.1.1 tell 192.168.1.2
19:20:45.696506 > gssm.cisco.com.49165 > gss.cisco.com.domain: 9220+ PTR?
10.128.1.2.in-addr.arpa. (44)
19:20:45.697003 < gss.cisco.com.domain > gssm.cisco.com.49165: 9220 NXDomain 0/1/0 (109)
19:20:45.697173 > gssm.cisco.com.49165 > gss.cisco.com.domain: 9221+ PTR?
22.128.168.192.in-addr.arpa. (45)
19:20:45.697471 < 10.1.2.3.1178 > gssm.cisco.com.ssh: . 1:1(0) ack 0 win 8600 (DF)
19:20:45.697649 < gss.cisco.com.domain > gssm.cisco.com.49165: 9221 NXDomain 0/1/0 (110)
19:20:45.697922 > gssm.cisco.com.ssh > 10.1.2.3.1178: P 1372:1696(324) ack 1 win 32680
(DF) [tos 0x10]
```

telnet

To establish a Telnet connection to a GSS device, use the **telnet** command in user level EXEC or privileged level EXEC mode.

telnet [**enable**] [*hostname* | *ip-address*]

Syntax Description

enable	Enables Telnet on the selected GSS device. This option is available in global configuration mode only.
hostname	Host name of device with which you want to establish a Telnet connection.
ip-address	IP address of device with which you want to establish a Telnet connection.

Defaults

No default behavior or values.

Command Modes

User, privileged EXEC, and global configuration.

Usage Guidelines

SSH and Telnet can run concurrently.

Examples

```
Host(config)# telnet enable
Host# telnet 10.1.2.3
```

Related Commands

ftp

ntp

snmp

ssh

terminal-length

To adjust the amount of screen information that can be displayed at one time on your terminal, use the terminal global configuration command.

terminal-length *number*

no terminal-length

Syntax Description

number	The number of screen rows, between 0 and 512

Defaults

The default terminal length is 23 lines.

Command Modes

Global configuration

Usage Guidelines

The **terminal-length** command allows you to adjust the number of rows of output that will be sent to your terminal screen at once by the GSS. The maximum number of rows is 512.

When set to 0, the GSS will send all of its data to the screen at once, without pausing.

Use the **no**- form of this command to restore the default terminal length, 23 lines.

Examples

```
Host(config)# terminal-length 512
Host(config)# no terminal-length
```

traceroute

To display the route to a host destination, use the **traceroute** EXEC command.

traceroute {*hostname* **|** *ip address***}**

Syntax Description

hostname	Host name of device to which you want to trace the packet route.
ip-address	IP address of device with which you want to trace the packet route.

Defaults

No default behavior or values

Command Modes

EXEC

Usage Guidelines

Use this command to display the route a packet to a host destination that you specify.

Examples

```
Host>traceroute www.cisco.com
traceroute to www.cisco.com (198.133.219.25), 30 hops max, 38 byte packets
1 bxb11-bb-gw1 (161.44.33.22)  1.112 ms  0.377 ms  0.353 ms
2 bxb11-man-gw2 (10.1.2.3)  0.586 ms  0.342 ms  0.314 ms
3 ch2-man-gw2 (10.3.4.5)  4.462 ms  4.135 ms  4.558 ms
4 sjck-rbb-gw2 (161.2.3.4)  75.958 ms  75.953 ms  75.891 ms
5 sj-wall-1 (161.5.6.7)  76.292 ms  76.336 ms  75.971 ms
6 sjce-dirty-gw1 (128.107.240.197)  77.098 ms  76.664 ms  76.286 ms
7 sjck-sdf-ciod-gw2 (128.107.239.102)  77.437 ms  77.845 ms  76.462 ms
8 * * *
9 * www (198.133.219.25)  78.627 ms *
WHAT_ID          HOW ===
...
```

type

To display a file, use the **type** EXEC command.

type *filename*

Syntax Description

filename	Name of file.

Defaults

No default behavior or values

Command Modes

EXEC

Usage Guidelines

Use this command to display the contents of a file within any GSS file directory. This command may be used to monitor features such as transaction logging or system logging (syslog).

Examples

```
Host# type /audit.log
atcr1.cisco.com>type audit.log

# Start logging at Tue Jan 22 23:59:30 GMT 2002
#=== WHEN                        WHAT_TABLE     WHAT_ID          HOW ===

# Start logging at Wed Jan 23 00:01:25 GMT 2002
#=== WHEN                        WHAT_TABLE     WHAT_ID          HOW ===

# Start logging at Thu Jan 31 14:42:40 GMT 2002
#=== WHEN                        WHAT_TABLE     WHAT_ID          HOW ===
...
```

Related Commands

dir

lls

ls

lsof

mkfile

tail

username

To establish username authentication, use the **username** global configuration command.

username *name* {**password** *word* **privilege** {**user** | **admin**} | **delete**}

Syntax Description

name	Username.
password	Establishes password.
word	User password.
privilege	Sets user privilege level.
user	Sets user privilege to normal user.
admin	Sets user privilege to administrative user.
delete	Deletes the named user or administrative account.

Defaults

No default behavior or values

Command Modes

Global configuration

Usage Guidelines

The **username** global configuration command is used to create new user or administrative accounts, change the password and privilege level for existing user accounts, or delete existing accounts.

Examples

The following example demonstrates how a new account can be set up or removed from a GSS device.

```
Host(config)# username testuser password mypassword privilege user
Host(config)# exit
Host# show user username testuser
testuser  user

Host(config)# username testuser delete
```

Related Commands

show user

show users

write

To save the current running configuration of the GSS as its startup configuration, use the **write** EXEC or global configuration command.

write memory

Syntax Description

memory	Saves recent configuration changes to the GSS that are stored in memory as the startup configuration.

Defaults

No default behavior or values

Command Modes

Privileged EXEC, global configuration

Usage Guidelines

Use the **write** command to save changes to the running configuration of the GSS device as the new startup configuration for device.

Examples

```
Host# write memory
```

Symbols

A

B

C

D

E

F

G

H

I

K

L

M

N

O

P

R

S

T

U

V