Blue Coat[®] Systems SG[™] Appliance

Configuration and Management Guide:

Volume 12: Command Line Interface Reference

Version SGOS 5.1.x



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Contents

Contact Information

Chapter 1: Introduction	
Audience for this Document	
Organization of this Document	
Related Blue Coat Documentation	
Document Conventions	
SSH and Script Considerations	
Standard and Privileged Modes	
Accessing Quick Command Line Help	
Accessing Quick Command Enterrier	I.
Chantar 2: Standard and Drivilaged Made Commande	
Chapter 2: Standard and Privileged Mode Commands Standard Mode Commands	1/
> display	
> enable	
> exit	
> help	
> ping	
> show	
> show access-log	
> show bandwidth-management	
> show bridge	
> show commands	
> show diagnostics	29
> show disk	
> show exceptions	
> show im	
> show ip-stats	
> show sources	
> show ssl	
> show streaming	
> traceroute	
Privileged Mode Commands	
# acquire-utc	
# bridge	
# cancel-upload	
# clear-arp# clear-cache	
# clear-statistics	
# configure	
# disable	
# disk	
# display	

# exit	50
# help	51
# hide-advanced	52
# inline	53
# kill	
# licensing	
# load	
# pcap	
# pcap filter	
# pcap start	
# ping	
# policy	
# purge-dns-cache	
# restart	
# restore-sgos4-config	
# restore-defaults	
# reveal-advanced	
# show	
# show adn	
# show attack-detection	
# show configuration	
# show content	
# show proxy-services	
# show security	
# show ssh	
# show ssl	
# temporary-route	
# test	
# traceroute	
# upload	
Chapter 3: Privileged Mode Configure Commands	
Configure Commands	87
#(config) accelerated-pac	
#(config) access-log	
#(config log log_name)	
#(config format format_name)	
#(config) adn	
#(config) alert	
#(config) archive-configuration	
#(config) attack-detection	
#(config client)	
#(config server)	
#(config) bandwidth-gain	
#(config) bandwidth-management	
#(config bandwidth-management <i>class_name</i>)	
#(config) banner#(config) banner	
#(config) bridge	
#(config bridge bridge name)	
"ICOILIE DIIGE DIWE IMIN'	144

#(config) caching	124
#(config caching ftp)	126
#(config) clock	128
#(config) console-services	129
#(config http-console)	130
#(config https-console)	
#(config ssh-console)	133
#(config telnet-console)	
#(config) content	
#(config) content-filter	
#(config bluecoat)	
#(config i-filter)	141
#(config intersafe)	143
#(config iwf)	
#(config local)	
#(config optenet)	
#(config proventia)	
#(config smartfilter)	
#(config surfcontrol)	
#(config websense)	
#(config webwasher)	
#(config) connection-forwarding	
#(config) diagnostics	
#(config service-info)	
#(config snapshot snapshot_name)	
#(config) dns	
#(config) event-log	
#(config) exceptions	
#(config exceptions [user-defined.]exception_id)	
#(config) exit#	172
#(config) external-services	
#(config icap icap_service_name)	
#(config service-group service_group_name)	
#(config websense websense_service_name)	120
#(config) failover	197
#(config) forwarding	
#(config forwarding group_alias)	
#(config forwarding host_alias)	
#(config) front-panel	
#(config) ftp	
#(config) health-check	
#(config health-check entry_name)	
#(config) hide-advanced	
#(config) hostname	
#(config) http	
#(config) icp	
#(config) identd	
#(config) im	
#(config) inline	204

#(config) installed-systems	205
#(config) interface	
#(config interface interface_number)	207
#(config) ip-default-gateway	209
#(config) license-key	210
#(config) line-vty	211
#(config) load	212
#(config) mapi	213
#(config) netbios	214
#(config) no	215
#(config) ntp	216
#(config) policy	217
#(config) profile	
#(config) proxy-services	220
#(config dynamic-bypass)	222
#(config static-bypass)	224
#(config aol-im)	225
#(config cifs)	226
#(config dns)	227
#(config endpoint-mapper)	228
#(config ftp)	229
#(config http)	230
#(config https-reverse-proxy)	232
#(config mms)	
#(config msn-im)	235
#(config rtsp)	
#(config socks)	237
#(config ssl)	238
#(config tcp-tunnel)	239
#(config telnet)	241
#(config yahoo-im)	242
#(config) restart	
#(config) return-to-sender	
#(config) reveal-advanced	245
#(config) rip	246
#(config) security	247
#(config security allowed-access)	
#(config security authentication-forms)	251
#(config security certificate)	
#(config security coreid)	255
#(config security default-authenticate-mode)	
#(config security destroy-old-password)	259
#(config security enable-password and hashed-enable-password)	
#(config security enforce-acl)	261
#(config security flush-credentials)	262
#(config security front-panel-pin and hashed-front-panel-pin)	
#(config security iwa)	
#(config security ldap)	266
#(config) security local	270

#(config security local-user-list)	272
#(config security management)	274
#(config) security password and hashed_password	275
#(config) security password-display	276
#(config security policy-substitution)	277
#(config security radius)	279
#(config security request-storage)	282
#(config security sequence)	
#(config security siteminder)	285
#(config windows-sso)	289
#(config) security transparent-proxy-auth	291
#(config) security username	292
#(config) session-monitor	293
#(config) sg-client	295
#config (sg-client adn)	297
#config (sg-client cifs)	299
#(config) shell	300
#(config) show	301
#(config) snmp	302
#(config) socks-gateways	304
#(config socks-gateways gateway_alias)	306
#(config) socks-machine-id	307
#(config) socks-proxy	308
#(config) ssh-console	309
#(config) ssl	310
#(config ssl ccl list_name)	314
#(config ssl crl_list_name)	
#(config ssl device-authentication-profile)	316
#(config ssl ssldefault_client_name)	317
#(config) static-routes	318
#(config) streaming	319
#(config) tcp-ip	
#(config) tcp-rtt	324
#(config) tcp-rtt-use	325
#(config) timezone	326
#(config) upgrade-path	327
#(config) virtual-ip	
#(config) wccp	329

Chapter 1: Introduction

To configure and manage your Blue Coat® Systems SG appliance, Blue Coat developed a software suite that includes an easy-to-use graphical interface called the Management Console and a Command Line Interface (CLI). The CLI allows you to perform the superset of configuration and management tasks; the Management Console, a subset.

This reference guide describes each of the commands available in the CLI.

Audience for this Document

This reference guide is written for system administrators and experienced users who are familiar with network configuration. Blue Coat assumes that you have a functional network topography, that you and your Blue Coat Sales representative have determined the correct number and placement of the SG appliance, and that those appliances have been installed in an equipment rack and at least minimally configured as outlined in the Blue Coat *Installation Guide* that accompanied the device.

Organization of this Document

This document contains the following chapters:

Chapter 1 – Introduction

The organization of this document; conventions used; descriptions of the CLI modes; and instructions for saving your configuration.

Chapter 2 – Standard and Privileged Mode Commands

All of the standard mode commands, including syntax and examples, in alphabetical order. All of the privileged mode commands (except for the configure commands, which are described in Chapter 3), including syntax and examples, in alphabetical order.

Chapter 3 – # Configure Mode Commands

The #configure command is the most used and most elaborate of all of the CLI commands.

Related Blue Coat Documentation

You can download the following and other Blue Coat documentation in PDF format from the Blue Coat Web site at www.bluecoat.com. Note that the documents are on WebPower: You must have a WebPower account to access them.

Document Conventions

The following table lists the typographical and CLI syntax conventions used in this manual.

Convention	Definition
Italics	The first use of a new or Blue Coat-proprietary term.
Courier font	Command-line text that will appear on your administrator workstation.
Courier Italics	A command-line variable that should be substituted with a literal name or value pertaining to the appropriate facet of your network system.
Courier Boldface	A CLI literal that should be entered as shown.
{}	One of the parameters enclosed within the braces must be supplied
[]	An optional parameter or parameters.
1	Either the parameter before or after the pipe character can or must be selected, but not both.

SSH and Script Considerations

Consider the following when using the CLI during an SSH session or in a script:

Case Sensitivity. CLI command literals and parameters are not case sensitive.

Command Abbreviations. You can abbreviate CLI commands, provided you supply enough command characters as to be unambiguous. For example:

SGOS# configure terminal

Can be shortened to:

SGOS# conf t

Standard and Privileged Modes

The SG appliance CLI has three major modes—*standard*, *privileged*, and *configure privileged*. In addition, privileged mode has several subordinate modes. See the introduction in Chapter 2: "Standard and Privileged Mode Commands" on page 13 for details about the different modes.

- □ Standard mode prompt: >
- □ Privileged mode prompt: #
- ☐ Configure Privileged mode prompt: # (config)

Accessing Quick Command Line Help

You can access command line help at any time during a session. The following commands are available in both standard mode and privileged mode.

To access a comprehensive list of mode-specific commands:

Type help or ? at the prompt.

The help command displays how to use CLI help. For example:

```
SGOS> help
Help may be requested at any point in a command
by typing a question mark '?'.
1. For a list of available commands, enter '?' at
    the prompt.
2. For a list of arguments applicable to a command,
    precede the '?' with a space (e.g. 'show ?')
3. For help completing a command, do not precede
    the '?' with a space (e.g. 'sh?')
```

The ? command displays the available commands. For example:

```
SGOS> ?

display Display a text based url
enable Turn on privileged commands
exit Exit command line interface
help Information on help
ping Send echo messages
show Show running system information
traceroute Trace route to destination
```

To access a command-specific parameter list:

Type the command name, followed by a space, followed by a question mark.

Note that you must be in the correct mode—standard or privileged—to access the appropriate help information. For example, to get command completion help for pcap:

```
SGOS# pcap ?

bridge Setup the packet capture mode for bridges filter Setup the current capture filter

.
.
.
```

To get command completion for configuring the time:

```
SGOS#(config) clock ?

day Set UTC day
hour Set UTC hour
.
```

To access the correct spelling and syntax, given a partial command:

Type the first letter, or more, of the command, followed by a question mark (no spaces).

Note that you must be in the correct mode—standard or privileged—to access the appropriate help information. For example:

```
SGOS# p?
pcap ping purge-dns-cache
```

Chapter 2: Standard and Privileged Mode Commands

This chapter describes and provides examples for the Blue Coat SG appliance standard and privileged mode CLI commands. These modes have fewer permissions than enabled mode commands.

Privileged Mode Commands

Privileged mode provides a set of commands that enable you to view, manage, and change SG appliance settings for features such as log files, authentication, caching, DNS, HTTPS, packet capture filters, and security. You can cannot configure functionality such as SSL Proxy, HTTP compression, and the like.

The prompt changes from a greater than sign (>) to a pound sign (#), acting as an indicator that you are in privileged mode.

Enter privileged mode from standard mode by using the enable command:

```
SGOS> enable
Enable Password:*******
SGOS#
```

Configuration Mode Commands

The configure command, available only in enabled mode, allows you to configure the Blue Coat SG appliance settings from your current terminal session (configure terminal), or by loading a text file of configuration settings from the network (configure network). Enabled Mode commands are discussed in Chapter 3: Privileged Mode Configure Commands on page 87.

The prompt changes from a pound sign (#) to a #(config) prompt, acting as an indicator that you are in configuration mode .

Enter configuration mode from privileged mode by using the configure command:

```
SGOS# conf t
SGOS#(config)
```

No password is needed to enter enabled mode.

Standard Mode Commands

Standard mode is the default mode when you first log on. From standard mode, you can view but not change configuration settings. This mode can be password protected, but it is not required.

The standard mode prompt is a greater-than sign; for example:

```
ssh> ssh -1 username IP_address
password: *****
SGOS>
```

Commands available in standard mode are:

```
> display on page 15
View the content for the specified URL.
```

```
> enable on page 16
Changes the mode from Standard to Privileged.
```

- > exit on page 17 Exits Standard mode.
- > help on page 18
- > ping on page 19

Verifies that the system at hostname or IP address is active.

- > show on page 20 Displays system information.
- > traceroute on page 38
 Traces the route to a destination.

> display > display

> display

Synopsis

Use this command to display the content (such as HTML or Javascript) for the specified URL. This content is displayed one screen at a time. "—More—" at the bottom of the terminal screen indicates that there is additional code. Press the <spacebar> to display the next batch of content; press <Enter> to display one additional line of content.

This command is used for general HTTP connectivity testing

Syntax

> display url where url is a valid, fully-qualified text Web address.

Example

```
SGOS> display http://www.bluecoat.com
10.9.59.243 - Blue Coat SG200>display http://www.bluecoat.com
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN"</pre>
"http://www.w3.org/TR/html4/loose.dtd">
<HTML>
<HEAD>
<TITLE>Blue Coat Systems</TITLE>
<META http-equiv="Content-Type" content="text/html; charset=iso-8859-1">
<META NAME="keywords" CONTENT="spyware WAN application spyware removal spy ware</pre>
spyware remover application delivery to branch office accelerate performance
applications remove spyware spyware application delivery secure application
acceleration control SSL threat anti-virus protection WAN optimization AV
appliance spyware blocker application acceleration distributed security
application performance spyware killer spyware WebFilter protection CIFS MAPI
streaming video Web application security branch offices secure endpoint
protection SSL policy control remote user acceleration WAN delivery application
performance WebFilter endpoint security fast WAN policy control spyware detection
spyware eliminator block endpoint security spyware secure MAPI appliances SSL AV
policy control stop spyware remove AV appliance SSL proxy Http secure Web
application acceleration encryption Proxy Internet Proxy Internet Proxy Cache
security proxy cache proxy server CIFS proxy servers branch office Web proxy
appliance enterprise data center accelerate WAN and CIFS and MAPI and streaming
video policy protection blue coat Web proxy Internet Web AV security systems blue
coat branch office anti-virus performance blue coat remote users WAN performance
acceleration Internet MAPI monitoring AV endpoint Internet application delivery
management endpoint protection and security and acceleration of application
content delivery with policy control Internet CIFS Web application filtering
content filtering Web filtering web filter WAN filtered internet application
acceleration">
```

. .

> enable > enable

> enable

Synopsis

Use this command to enter Privileged mode. Privileged mode commands enable you to view and change your configuration settings. A password is always required.

Syntax

> enable

The enable command has no parameters or subcommands.

For More Information

```
    # disable on page 47
    #(config) security username on page 292
    #(config) security password and hashed_password on page 275
```

Example

```
SGOS> enable
Enable Password:*****
SGOS# conf t
SGOS(config)
```

Where conf t is a shortcut to typing configure terminal.

> exit > exit

> exit

Synopsis

Use this command to exit the CLI. In privileged and configuration mode, exit returns you to the previous prompt.

Syntax

> exit

The exit command has no parameters or subcommands.

Example

SGOS> exit

> help

> help

See Accessing Quick Command Line Help on page 11 for information about this command.

> ping

> ping

Synopsis

Use this command to verify whether a particular host is reachable across a network.

Syntax

```
> ping {hostname | ip_address}
```

Subcommands

```
> ping hostname
Specifies the name of the host you want to verify.
```

> ping ip_address
Specifies the IP address you want to verify.

```
SGOS> ping 10.25.36.47

Type escape sequence to abort.

Sending 5, 64-byte ICMP Echos to 10.25.36.47, timeout is 2 seconds:
!!!!! Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Number of duplicate packets received = 0
```

> show

Synopsis

Use this command to display system information. You cannot view all show commands, here, only those available in the standard mode. You must be in privileged mode to show commands available.

Syntax

> **show** [subcommands]

Subcommands

Note: Hyperlinked (blue) options contain additional information.

> show accelerated-pac

Displays accelerated PAC file information.

> show access-log on page 25

Displays the current access log settings.

> show arp-table

Displays TCP/IP ARP table information.

> show bandwidth-gain

Displays bandwidth gain status, mode, and the status of the "substitute get for get-if-modified-since," "substitute get for HTTP 1.1 conditional get," and "never refresh before specified object expiry" features.

> show bandwidth-management on page 26

Displays bandwidth management configuration and statistics information.

> show bridge on page 27

Displays information about bridging on the system.

> show caching

Displays data regarding cache refresh rates and settings and caching policies.

> show cifs

Displays CIFS settings

> show clock

Displays the current SG appliance time setting.

> show commands on page 28

Displays the available CLI commands.

> show console-services

Displays information on the console services enabled or disabled on the system.

> show content-distribution

Displays the average sizes of objects in the cache.

> show cpu

Displays CPU usage.

> show cpu-monitor

Displays the state of the CPU monitor.

> show diagnostics on page 29

Displays remote diagnostics information.

> show disk on page 30

Displays disk information, including slot number, vendor, product ID, revision and serial number, capacity, and status, about all disks or a specified disk.

> show dns

Displays primary and alternate DNS server data.

> show download-paths

Displays downloaded configuration path information, including the policy list, accelerated PAC file, HTTP error page, ICP settings, RIP settings, static route table, upgrade image, and WCCP settings.

> show efficiency

Displays efficiency statistics by objects and by bytes, as well as information about non-cacheable objects and access patterns.

> show epmapper [statistics]

Displays proxy settings or statistics.

> show event-log [configuration]

Show the event-log configuration.

> show exceptions on page 31

Displays all exceptions or just the built-in or user-defined exception you specify.

> show external-services [statistics]

Displays external services or external services statistics information.

> show failover[group_address]

Displays failover settings for the specified group or all groups.

> show forwarding

Displays advanced forwarding settings, including download-via-forwarding, health check, and load balancing status, and the definition of forwarding hosts/groups and advanced forwarding rules.

> show ftp

Displays the FTP settings on the system.

> show health-checks

Displays health check information.

> show hostname

Displays the current hostname, IP address, and type.

> show http

Displays HTTP configuration information.

> show http-stats

Displays HTTP statistics, including HTTP statistics version number, number of connections accepted by HTTP, number of persistent connections that were reused, and the number of active client connections.

> show icp-settings

Displays ICP settings.

> show identd

Displays IDENTD service settings.

> show im on page 33

Displays IM information

> show installed-systems

Displays SG appliance system information, listing the current five version and release numbers, boot and lock status, and timestamp information.

> show interface {all | interface number}

Displays interface status and configuration information.

> show ip-default-gateway

Specifies the default IP gateway.

> show ip-route-table

Displays route table information.

> show ip-rts-table

Displays return-to-sender route table information.

> show ip-stats on page 34

Displays TCP/IP statistics

>show licenses

Displays license information.

> show mapi

Displays settings for the MAPI proxy.

> show netbios

Displays NETBIOS settings.

> show ntp

Displays NTP servers status and information.

> show p2p [statistics]

Displays P2P statistics

> show policy [listing | order |policy]

Displays current state of the policy.

> show profile

Displays the system profile.

> show resources

Displays allocation of disk and memory resources.

> show restart

Displays system restart settings, including core image information and compression status.

> show return-to-sender

Displays "return to sender" inbound and outbound settings.

> show rip {default-route | parameters | routes | statistics}

Displays information on RIP settings, including parameters and configuration, RIP routes, and RIP statistics.

> show sessions

Displays information about the CLI session.

> show shell

Displays the settings for the shell, including the maximum connections, the prompt, and the realm- and welcome-banners.

> show snmp

Displays SNMP statistics, including status and MIB variable and trap information

> show socks-gateways

Displays SOCKS gateway settings.

> show socks-machine-id

Displays the identification of the secure sockets machine.

> show socks-proxy

Displays SOCKS proxy settings.

> show sources on page 35

Displays source listings for installable lists, such as the license key, policy files, ICP settings, RIP settings, static route table, and WCCP settings files.

> show ssl on page 36

Displays ssl settings.

> show static-routes

Displays static route table information.

> show status

Displays current system status information, including configuration information and general status information.

> show streaming on page 37

Displays QuickTime, RealNetworks, or Microsoft Windows Media information, and client and total bandwidth configurations and usage.

> show tcp-ip

Displays TCP-IP parameters.

> show tcp-rtt

Displays default TCP round trip time ticks.

> show terminal

Displays terminal configuration parameters and subcommands.

> show timezones

Displays timezones used.

> show user-authentication

Displays Authenticator Credential Cache Statistics, including credential cache information, maximum number of clients queued for cache entry, and the length of the longest chain in the hash table.

> show version

Displays SG appliance hardware and software version and release information and backplane PIC status.

> show virtual-ip

Displays the current virtual IP addresses

> show wccp {configuration | statistics}

Displays WCCP configuration and statistics information.

```
SGOS> show caching
Refresh:
     Estimated access freshness is 100.0%
     Let the ProxySG Appliance manage refresh bandwidth
     Current bandwidth used is 0 kilobits/sec
Policies:
     Do not cache objects larger than 1024 megabytes
     Cache negative responses for 0 minutes
     Let the ProxySG Appliance manage freshness
FTP caching:
     Caching FTP objects is enabled
     FTP objects with last modified date, cached for 10% of last modified time
     FTP objects without last modified date, initially cached for 24 hours
SGOS> show resources
Disk resources:
     Maximum objects supported:
                                  1119930
     Cached Objects:
                                  Ω
     Disk used by system objects: 537533440
     Disk used by access log:
                                  0
     Total disk installed:
                                 18210036736
```

Memory resources:

In use by cache: 699203584
In use by system: 83230176
In use by network: 22872608
Total RAM installed: 805306368

SGOS> show failover configuration group_address

Failover Config

Group Address: 10.25.36.47

Multicast Address : 224.1.2.3 Local Address : 10.9.17.159

Secret : none
Advertisement Interval: 40
Priority : 100
Current State : DISABLED
Flags : V M

Three flags exist, set as you configure the group.

V—Specifies the group name is a virtual IP address.

R—Specifies the group name is a physical IP address

M—Specifies this machine can be configured to be the master if it is available

> show > show access-log

> show access-log

Synopsis

Displays the current access log settings.

Syntax

> show access-log [subcommands]

Subcommands

- > show access-log default-logging
 Display the access log default policy.
- > show access-log format brief
 Displays the access log format names.
- > show access-log format format_name

 Displays the access log with the specified format_name.
- > show access-log format
 Displays the access-log formats for all log types.
- > show access-log log brief
 Displays the access log log names.
- > show access-log log log_name
 Displays the access log with the specified log_name.
- > show access-log log
 Displays the access-log for all logs.
- > show access-log statistics log_name
 Displays access-log statistics for the specific log_name.
- > show access-log statisticsDisplays all access-log statistics.

For More Information

□ Volume 9: Access Logging

```
> show access-log format brief
Formats:
squid
ncsa
main
im
streaming
websense
surfcontrol
smartreporter
surfcontrolv5
p2p
ssl
cifs
mapi
```

> show bandwidth-management

Synopsis

Displays the bandwidth management state (enabled or disabled) or statistics.

Syntax

> show bandwidth-management {configuration | statistics}

Subcommands

- > show bandwidth-management configuration bandwidth_class
 Displays the bandwidth-management configuration for the specified bandwidth class. If you do not specify a bandwidth class, displays the bandwidth-management configuration for the system.
- > show bandwidth-management statistics bandwidth_class
 Displays the bandwidth-management statistics for the specified bandwidth class. If you do not specify a bandwidth class, displays the bandwidth-management statistics for the system.

For More Information

□ Volume 6: Advanced Networking

Example

> show bandwidth-management configuration Bandwidth Management Enabled

> show > show > show

> show bridge

Synopsis

Displays bridge configuration and statistics.

Syntax

```
> show bridge [subcommands]
```

Subcommands

```
> show bridge configuration [bridge_name]
```

Displays the bridge configuration for the specified bridge_name or for all interfaces on the system.

> show bridge fwtable [bridge_name]

Displays the bridge forwarding table for the specified bridge name or for all interfaces on the system.

> show bridge statistics [bridge name]

Displays the bridge statistics for the specified bridge_name or for all interfaces on the system.

For More Information

□ Volume 2: Getting Started

```
> show bridge configuration
```

```
Bridge passthru-0 configuration:
 Interface 0:0
   Internet address: 10.9.59.246
   Internet subnet: 255.255.255.0
   MTU size:
                    1500
                 disabled
   Spanning tree:
   Allow intercept: enabled
   Reject inbound: disabled
   Status:
                   autosensed full duplex, 100 megabits/sec network
 Interface 0:1
   MTU size:
                  1500
   Spanning tree: disabled
   Allow intercept: enabled
   Reject inbound: disabled
   Status:
                    autosensed no link
```

> show > show > show commands

> show commands

Synopsis

Displays the available CLI commands.

Syntax

> show commands [subcommands]

Subcommands

- > show commands delimited [all | privileged]

 Delimited displays commands so they can be parsed.
- > show commands formatted [all | privileged]
 Formatted displays commands so they can be viewed easily.

```
> show commands formatted
1:show
                               Show running system information
                               Access log settings
 2:access-log
                               Show Access log configuration
   3:log
                              Show Access log names
     4:brief
       <log-name>
                               Show Access log format configuration
   3:format
     4:brief
                              Show Access log format names
       <format-name>
   3:statistics
                               Show Access log statistics
     <logName>
   3:default-logging
                               Show Access log default policy
> show commands delimited
1; show; Show running system information; sh; 0;11
2;access-log;Access log settings;acces;0;11
3;log;Show Access log configuration;l;0;11
4; brief; Show Access log names; b; 0; 11
p;<log-name>; *; *; 0; 14
3; format; Show Access log format configuration; f; 0; 11
4;brief;Show Access log format names;b;0;11
p;<format-name>; *; *; 0; 14
3; statistics; Show Access log statistics; s; 0; 11
p;<logName>; *; *; 0; 14
3; default-logging; Show Access log default policy; d; 0; 11
```

> show diagnostics > show

> show diagnostics

Synopsis

Displays remote diagnostics information, including version number, and whether the Heartbeats feature and the SG appliance monitor are currently enabled.

Syntax

> show diagnostics [subcommands]

Subcommands

- > show diagnostics configuration Displays diagnostics settings.
- > show diagnostics cpu-monitor Displays the CPU Monitor results.
- > show diagnostics service-info Displays service-info settings.
- > show diagnostics snapshot Displays the snapshot configuration.

Example

> show diagnostics snapshot

```
Snapshot sysinfo
 Target: /sysinfo
```

Status: Enabled
Interval: 1440 minutes
To keep: 30
To take: Infinite

Next snapshot: 2006-03-18 00:00:00 UTC

Snapshot sysinfo stats

Target: /sysinfo-stats
Status: Enabled
Interval: 60 minutes
To keep: 30
To take: Infinite

Next snapshot: 2006-03-17 20:00:00 UTC

> show disk

Synopsis

Displays disk information, including slot number, vendor, product ID, revision and serial number, capacity, and status, about all disks or a specified disk.

Syntax

```
> show disk {disk_number | all}
```

Subcommands

> **show disk** *disk_number*Displays information on the specified disk.

> show disk all

Displays information on all disks in the system.

Example

> show disk 1

Disk in slot 1 Vendor: SEAGATE Product: ST340014A Revision: 8.54

Disk serial number: 5JVQ76VS Capacity: 40020664320 bytes

Status: present

> show > show > ceptions

> show exceptions

Synopsis

Displays all exceptions or just built-in or user defined exceptions.

Syntax

```
> show exceptions [built-in_id | user-defined_id]
```

For More Information

```
☐ #(config) exceptions on page 171
```

```
> show exceptions
```

```
Built-in:
authentication_failed
authentication_failed_password_expired
authentication mode not supported
authentication_redirect_from_virtual_host
authentication_redirect_off_box
authentication redirect to virtual host
authentication_success
authorization_failed
bad credentials
client_failure_limit_exceeded
configuration_error
connect method denied
content_filter_denied
content_filter_unavailable
dns server failure
dns_unresolved_hostname
dynamic_bypass_reload
gateway_error
icap_communication_error
icap error
internal error
invalid_auth_form
invalid_request
invalid response
license_exceeded
license_expired
method denied
not_implemented
notify
notify missing cookie
policy_denied
policy_redirect
radius splash page
redirected stored requests not supported
refresh
server request limit exceeded
silent denied
spoof_authentication_error
ssl client cert revoked
ssl domain invalid
```

> show > show exceptions

```
ssl_failed
ssl_server_cert_expired
ssl_server_cert_revoked
ssl_server_cert_untrusted_issuer
tcp_error
transformation_error
unsupported_encoding
unsupported_protocol
```

> show > show im

> show im

Synopsis

Displays Instant Messaging settings.

Syntax

> show im [subcommands]

Subcommands

- > show im configuration
 Displays IM configuration information.
- > show im aol-statistics
 Displays statistics of AOL IM usage.
- > show im msn-statistics
 Displays statistics of MSN IM usage.
- > show im yahoo-statistics
 Displays statistics of Yahoo! IM usage.

For More Information

□ Volume 4: Web Communication Proxies.

Example

> show im configuration

```
IM Configuration
aol-admin-buddy:
                         Blue Coat SG
msn-admin-buddy:
                         Blue Coat SG
yahoo-admin-buddy:
                         Blue Coat SG
exceptions:
                         out-of-band
buddy-spoof-message:
                         <none>
http-handoff:
                         enabled
explicit-proxy-vip:
                         <none>
aol-native-host:
                         login.oscar.aol.com
aol-http-host:
                         aimhttp.oscar.aol.com
aol-direct-proxy-host:
                         ars.oscar.aol.com
msn-native-host:
                         messenger.hotmail.com
msn-http-host:
                         gateway.messenger.hotmail.com
yahoo-native-host:
                         scs.msg.yahoo.com
yahoo-http-host:
                         shttp.msg.yahoo.com
yahoo-http-chat-host:
                         http.chat.yahoo.com
                         filetransfer.msg.yahoo.com
yahoo-upload-host:
yahoo-download-host:
                         .yahoofs.com
```

> show > show ip-stats

> show ip-stats

Synopsis

Displays TCP/IP statistics.

Syntax

> show ip-stats [subcommands]

Subcommands

```
> show ip-stats all
Display TCP/IP statistics.
```

> show ip-stats interface {all | number}
 Displays TCP/IP statistics for all interfaces or for the specified number (0 to 7).

> show ip-stats ip Displays IP statistics.

> show ip-stats memory
Displays TCP/IP memory statistics.

> show ip-stats summary
Displays TCP/IP summary statistics.

> show ip-stats tcp Displays TCP statistics.

> show ip-stats udp Displays UDP statistics.

```
> show ip-stats summary
; TCP/IP Statistics
TCP/IP General Statistics
Entries in TCP queue: 12
Maximum entries in TCP queue: 19
Entries in TCP time wait queue: 0
Maximum entries in time wait queue: 173
Number of time wait allocation failures: 0
Entries in UDP queue: 2
```

> show > show > show sources

> show sources

Synopsis

Displays source listings for installable lists, such as the license key, policy files, ICP settings, RIP settings, static route table, and WCCP settings files.

Syntax

> show sources [subcommands]

Subcommands

```
> show sources forwarding
Displays forwarding settings.
```

```
> show sources icp-settings
Displays ICP settings.
```

```
> show sources license-key
Displays license information
```

```
> show sources policy {central | local | forward | vpm-cpl | vpm-xml}
    Displays the policy file specified.
```

```
> show sources rip-settings
Displays RIP settings.
```

- > show sources socks-gateways
 Displays the SOCKS gateways settings.
- > show sources static-route-table

 Displays the static routing table information.
- > show sources wccp-settings Displays WCCP settings.

```
> show sources socks-gateways
# Current SOCKS Gateways Configuration
# No update
# Connection attempts to SOCKS gateways fail: closed
socks_fail closed
# 0 gateways defined, 64 maximum
# SOCKS gateway configuration
# gateway <gateway-alias> <gateway-domain> <SOCKS port>
# [version=(4|5 [user=<user-name> password=<password>]
# [request-compression=yes|no])]
# Default fail-over sequence.
# sequence <gateway-alias> <gateway-alias> ...
# The default sequence is empty.
# SOCKS Gateways Configuration Ends
```

> show ssl

Synopsis

Displays SSL settings

Syntax

```
> {\tt show} \ {\tt ssl} \ \big\{ {\tt ccl} \ [{\tt list\_name}] \ \big| \ {\tt ssl-client} \ [{\tt ssl\_client}] \big\}
```

Subcommands

- > show ssl ccl [list_name]
 Displays currently configured CA certificate lists or configuration for the specified list_name.
- > show ssl ssl-client [ssl_client]
 Displays information about the specified SSL client.

> show > show > show streaming

> show streaming

Synopsis

Displays QuickTime, RealNetworks, or Microsoft Windows Media information, and client and total bandwidth configurations and usage.

Syntax

> show streaming [subcommands]

Subcommands

- > show streaming configuration
 Displays global streaming configuration.
- > show streaming quicktime {configuration | statistics} Displays QuickTime configuration and statistics.
- > show streaming real-media {configuration | statistics} Displays Real-Media configuration and statistics.
- > show streaming windows-media {configuration | statistics} Displays Windows-Media configuration and statistics.
- > show streaming statistics
 Displays client and gateway bandwidth statistics.

For More Information

□ *Volume 4: Web Communication Proxies*

Example

> show streaming configuration

```
; Streaming Configuration
max-client-bandwidth: unlimited
max-gateway-bandwidth: unlimited
multicast address: 224.2.128
```

multicast address: 224.2.128.0 - 224.2.255.255

multicast port: 32768 - 65535

multicast TTL: 16

> traceroute > traceroute

> traceroute

Use this command to trace the route from the current host to the specified destination host.

Syntax

> traceroute [subcommands]

Subcommands

- > traceroute *ip_address*Specifies the IP address of the destination host.
- > traceroute *hostname*Specifies the name of the destination host.

```
SGOS> traceroute 10.25.36.47
Type escape sequence to abort.
Tracing the route to 10.25.36.47
1 10.25.36.47 0 0 0
```

Privileged Mode Commands

Privileged mode provides a robust set of commands that enable you to view, manage, and change SG appliance settings for features such as log files, authentication, caching, DNS, HTTPS, packet capture filters, and security.

Note: The privileged mode subcommand, configure, enables you to manage the SG appliance features.

acquire-utc # acquire-utc

acquire-utc

Synopsis

Use this command to acquire the Universal Time Coordinates (UTC) from a Network Time Protocol (NTP) server. To manage objects, a SG appliance must know the current UTC time. Your SG appliance comes pre-populated with a list of NTP servers available on the Internet, and attempts to connect to them in the order they appear in the NTP server list on the NTP tab. If the SG appliance cannot access any of the listed NTP servers, the UTC time must be set manually. For instructions on how to set the UTC time manually, refer to *Volume 2: Getting Started*.

Syntax

acquire-utc

The acquire-utc command has no parameters or subcommands.

Example

SGOS# acquire-utc ok

bridge # bridge

bridge

Synopsis

This command clears bridge data.

Syntax

bridge {subcommands]

Subcommands

- # bridge clear-statistics bridge_name
 Clears bridge statistics.
- # bridge clear-fwtable bridge_name Clears bridge forward table.

For More Information

□ Volume 2: Getting Started

Example

SGOS# bridge clear-statistics testbridge ok

cancel-upload # cancel-upload

cancel-upload

Synopsis

This command cancels a pending access-log upload. The cancel-upload command allows you to stop repeated upload attempts if the Web server becomes unreachable while an upload is in progress. This command sets log uploading back to idle if the log is waiting to retry the upload. If the log is in the process of uploading, a flag is set to the log. This flag sets the log back to idle if the upload fails.

Syntax

```
# cancel-upload [subcommands]
```

Subcommands

- # cancel-upload all Cancels upload for all logs.
- # cancel-upload log log_name Cancels upload for a specified log.

For More Information

□ Volume 9: Access Logging

```
SGOS# cancel-upload all ok
```

clear-arp # clear-arp

clear-arp

Synopsis

The clear-arp command clears the Address Resolution Protocol (ARP) table. ARP tables are used to correlate an IP address to a physical machine address recognized only in a local area network. ARP provides the protocol rules for providing address conversion between a physical machine address (also known as a Media Access Control or MAC address) and its corresponding IP address, and vice versa.

Syntax

```
# clear-arp
```

The clear-arp command has no parameters or subcommands.

```
SGOS# clear-arp ok
```

clear-cache # clear-cache

clear-cache

Synopsis

This command clears the byte, dns, or object cache. This can be done at any time. However, keep in mind that if any cache is cleared, performance slows down until the cache is repopulated.

Note: #clear-cache with no arguments can also be used to clear the object cache.

Syntax

clear-cache [subcommands]

Subcommands

- # clear-cache byte-cache Clears the byte cache.
- # clear-cache dns-cache Clears the DNS cache.
- # clear-cache object-cache
 Sets all objects in the cache to expired.

Example

SGOS# clear-cache byte-cache ok

clear-statistics # clear-statistics

clear-statistics

Synopsis

This command clears the bandwidth-management, persistent, and Windows Media, Real Media, and QuickTime streaming statistics collected by the SG appliance. To view streaming statistics from the CLI, use either the show streaming {quicktime | real-media | windows-media} statistics or the show bandwidth-management statistics [bandwidth_class] commands. To view streaming statistics from the Management Console, go to either Statistics > Streaming History > Windows Media/Real Media/Quicktime, or to Statistics > Bandwidth Mgmt.

Syntax

clear-statistics [subcommands]

Subcommands

clear-statistics bandwidth-management [class class_name]
Clears bandwidth-management statistics, either for all classes at one time or for the bandwidth-management class specified

clear-statistics efficiency Clears efficiency statistics.

clear-statistics epmapper

Clears Endpoint Mapper statistics.

#clear-statistics persistent [prefix]

Clears statistics that persist after a reboot. You can clear all persistent statistics, or, since statistics are kept in a naming convention of group: stat, you can limit the statistics cleared to a specific group. Common prefixes include HTTP, SSL, and SOCKS.

- # clear-statistics quicktime Clears QuickTime statistics.
- # clear-statistics real-media Clears Real Media statistics.
- # clear-statistics windows-media Clears Windows Media statistics.

Example

SGOS# clear-statistics windows-media ok

configure # configure

configure

Synopsis

The privileged mode subcommand configure, enables you to manage the SG appliance features.

Syntax

config t

Where conf refers to configure and t refers to terminal.

This changes the prompt to #(config). At this point you are in configure terminal mode and can make permanent changes to the device.

config network url

This command downloads a previously loaded web-accessible script, such as a configuration file, and implements the changes in the script onto the system.

For More Information

☐ Chapter 3: "Privileged Mode Configure Commands" on page 87

Example

conf n http://1.1.1.1/fconfigure.txt

disable # disable

disable

Synopsis

The $\ensuremath{\mathtt{disable}}$ command returns you to Standard mode from Privileged mode.

Syntax

disable

The disable command has no parameters or subcommands.

For More Information

```
□ > enable on page 16
□ # exit on page 50
```

```
SGOS# disable
SGOS>
```

disk # disk

disk

Synopsis

Use the disk command to take a disk offline or to re-initialize a disk.

On a multi-disk SG appliance, after issuing the disk reinitialize disk_number command, complete the reinitialization by setting it to empty and copying pre-boot programs, boot programs and starter programs, and system images from the master disk to the re-initialized disk. The master disk is the leftmost valid disk. *Valid* indicates that the disk is online, has been properly initialized, and is not marked as invalid or unusable.

Note: If the current master disk is taken offline, reinitialized or declared invalid or unusable, the leftmost valid disk that has not been reinitialized since restart becomes the master disk. Thus as disks are reinitialized in sequence, a point is reached where no disk can be chosen as the master. At this point, the current master disk is the last disk. If this disk is taken offline, reinitialized, or declared invalid or unusable, the SG appliance is restarted.

Reinitialization is done without rebooting the SG appliance. The SG appliance operations, in turn, are not affected, although during the time the disk is being reinitialized, that disk is not available for caching. Note that only the master disk reinitialization might restart the SG appliance.

Syntax

```
# disk {subcommands]
```

Subcommands

```
# disk disk offline disk_number
Takes the disk specified by disk_number off line.
```

```
# disk disk reinitialize disk_number
Reinitializes the disk specified by disk_number.
```

```
SGOS# disk offline 3
ok
SGOS# disk reinitialize 3
ok
```

display

display

See > display on page 15 for more information.

exit # exit

exit

Synopsis

Exits from Configuration mode to Privileged mode, from Privileged mode to Standard mode. From Standard mode, the exit command closes the CLI session.

Syntax

exit

The exit command has no parameters or subcommands.

Example

SGOS# exit

help

help

See Accessing Quick Command Line Help on page 11 for information about this command.

hide-advanced # hide-advanced

hide-advanced

Synopsis

Use this command to disable advanced commands.

Note: You can also use the configure command SGOS#(config) hide-advanced {all | expand} to hide commands.

Syntax

hide-advanced [subcommands]

Subcommands

hide-advanced all
Hides all advanced commands.

hide-advanced expand
Disables expanded commands.

For More Information

□ # reveal-advanced on page 70

```
SGOS# hide-advanced expand ok
SGOS# hide-advanced all ok
```

inline # inline

inline

Synopsis

Installs lists based on your terminal input.

Discussion

The easiest way to create installable lists, such as forwarding hosts, PAC files, and policy files, among others, is to take an existing file and modify it, or to create the text file on your local system, upload the file to a Web server, and download the file to the SG appliance. As an alternative, you can enter the list directly into the SG appliance through the inline command, either by typing the list line by line or by pasting the contents of the file.

If you choose to create a text file to contain the configuration commands and settings, be sure to assign the file the extension .txt. Use a text editor to create this file, noting the following SG appliance configuration file rules:

- Only one command (and any associated parameters) permitted, per line
- □ Comments must begin with a semicolon (;)
- ☐ Comments can begin in any column, however, all characters from the beginning of the comment to the end of the line are considered part of the comment and, therefore, are ignored

Tips:

- □ When entering input for the inline command, you can correct mistakes on the current line using the backspace key. If you catch a mistake in a line that has already been terminated with the Enter key, you can abort the inline command by typing <Ctrl-c>. If the mistake is caught after you terminate input to the inline command, you must re-enter the entire content.
- The end-of-input marker is an arbitrary string chosen by the you to mark the end of input for the current inline command. The string can be composed of standard characters and numbers, but cannot contain any spaces, punctuation marks, or other symbols.

Choose a unique end-of-input string that does not match any string of characters in the configuration information. One recommended end-of-input string is ''' (three single quotes).

Syntax

inline {subcommands]

Subcommands

inline accelerated-pac eof_marker

Updates the accelerated pac file with the settings you include between the beginning <code>eof_marker</code> and the ending <code>eof_marker</code>.

- # inline authentication-form form_name eof_marker
 - Install an authentication form from console input
- # inline authentication-forms eof_marker
 Install all authentication form from console input
- # inline forwarding eof marker

Updates the forwarding configuration with the settings you include between the beginning <code>eof_marker</code> and the ending <code>eof_marker</code>.

inline # inline

inline icp-settings eof marker

Updates the current ICP settings with the settings you include between the beginning <code>eof_marker</code> and the ending <code>eof_marker</code>.

inline license-key eof_marker

Updates the current license key settings with the settings you include between the beginning <code>eof_marker</code> and the ending <code>eof_marker</code>.

inline policy

Updates the current policy settings—central, local, forward, vpm-cpl, and vpm-xml—with the settings you include between the beginning eof_marker and the ending eof_marker.

inline rip-settings eof marker

Updates the current RIP settings with the settings you include between the beginning <code>eof_marker</code> and the ending <code>eof_marker</code>.

inline socks-gateways eof_marker

Updates the current SOCKS gateway settings with the settings you include between the beginning <code>eof_marker</code> and the ending <code>eof_marker</code>.

inline static-route-table eof marker

Updates the current static route table settings with the settings you include between the beginning <code>eof_marker</code> and the ending <code>eof_marker</code>.

inline wccp-settings eof_marker

Updates the current WCCP settings with the settings you include between the beginning <code>eof_marker</code> and the ending <code>eof marker</code>.

For More Information

- man pages for the specific component (wccp, acc pac, etc)
- □ # load on page 57

```
SGOS# inline wccp eof wccp enable eof
```

kill

kill

Synopsis

Terminates a CLI session.

Syntax

```
\# \ \mathbf{kill} \ session\_number
```

where session_number is a valid CLI session number.

licensing # licensing

licensing

Synopsis

Use these commands to request or update licenses.

Syntax

```
# licensing [subcommands]
```

Subcommands

```
# licensing request-key [user_id] [password]
Requests the license key from Blue Coat using the WebPower user ID and password.
```

licensing update-key
Updates the license key from Blue Coat now.

licensing register-hardware Register hardware with Bluecoat.

licensing mark-registered

Mark the hardware registered manually.

licensing disable-trial Disable trial period.

licensing enable-trial Enable trial period.

For More Information

□ Volume 2: Getting Started

Example

```
SGOS# licensing request-key
User ID: admin
Password: *****
...
ok
```

where "..." represents license download-in-progress information.

load # load

load

Synopsis

Downloads installable lists or system upgrade images. These installable lists or settings also can be updated using the inline command.

Syntax

load accelerated-pac

Downloads the current accelerated pac file settings.

load authentication-form form name

Downloads the new authentication form.

load authentication-forms

Downloads the new authentication forms.

load exceptions

Downloads new exceptions.

load forwarding

Downloads the current forwarding settings.

load icp-settings

Downloads the current ICP settings.

load license-key

Downloads the new license key.

load policy {central | forward | local | vpm-cpl | vpm-xml}

Downloads the policy file specified

load rip-settings

Downloads the current RIP settings.

load socks-gateways

Downloads the current SOCKS gateways settings.

load sg-client-software

Loads the SG Client software to the Client Manager. To use this command, you must have previously defined an upload location using #(config sg-client) software-upgrade-path url on page 296.

Messages display as the software loads.

load static-route-table

Downloads the current static route table settings.

load upgrade [ignore-warnings]

Downloads the latest system image. The ignore-warnings option allows you to force an upgrade even if you receive policy deprecation warnings. Note that using the load upgrade ignore-warnings command to force an upgrade while the system emits deprecation warnings results in a policy load failure; all traffic is allowed or denied according to default policy.

load wccp-settings

Downloads the current WCCP settings.

For More Information

□ # inline on page 53

load # load

```
> show download-paths
Policy
 Local:
 Forward:
 VPM-CPL:
 VPM-XML:
 Central: https://download.bluecoat.com/release/SG3/files/CentralPolicy.txt
   Update when changed: no
   Notify when changed: no
   Polling interval:
                        1 day
 Accelerated PAC:
 ICP settings:
 RIP settings:
 Static route table:
 Upgrade image:
  bcserver1.bluecoat.com/builds/ca_make.26649/wdir/8xx.CHK_dbg
 WCCP settings:
 Forwarding settings:
 SOCKS gateway settings:
 License key:
 Exceptions:
 Authentication forms:
>en
 Enable Password
# load upgrade
 Downloading from
"bcserver1.bluecoat.com/builds/ca make.26649/wdir/8xx.CHK dbg"
 Downloading new system software (block 2611)
 The new system software has been successfully downloaded.
 Use "restart upgrade" to install the new system software.
```

pcap # pcap

pcap

Synopsis

The PCAP utility enables you to capture packets of Ethernet frames entering or leaving a SG appliance. Packet capturing allows filtering on various attributes of the frame to limit the amount of data collected. The collected data can then be transferred to the desktop for analysis.

Note: Before using the PCAP utility, consider that packet capturing doubles the amount of processor usage performed in TCP/IP.

To view the captured packets, you must have a tool that can read Packet Sniffer Pro 1.1 files.

Syntax

```
# pcap [subcommands]
```

Subcommands

```
# pcap filter on page 60
Specifies filters to use for PCAP.
```

```
# pcap info
```

Displays the current packet capture information.

```
# pcap start on page 62
Starts the capture.
```

```
# pcap stop
```

Stops the capture.

pcap transfer full_url/filename username password
Transfers captured data to an FTP site.

For More Information

□ Volume 10: Managing the Blue Coat SG Appliance.

Example 1

```
Capture transactions among a SG appliance (10.1.1.1), a server (10.2.2.2), and a client (10.1.1.2).

SGOS# pcap filter expr "host 10.1.1.1 || host 10.2.2.2 || host 10.1.1.2"
```

Example 2

This example transfers captured packets to the FTP site 10.25.36.47. Note that the username and password are provided.

```
SGOS# pcap transfer ftp://10.25.36.47/path/filename.cap username password If the folders in the path do not exist, they are not created. An error message is generated.
```

pcap # pcap filter

pcap filter

Synopsis

After a filter is set, it remains in effect until it is redefined; the filtering properties are persistent across reboots. However, PCAP stops when a system is rebooted.

Syntax

```
# pcap filter [subcommands]
```

Subcommands

```
# pcap filter [direction {in | out | both}]

Specifies capture in the specified direction. If both is selected, both incoming and outgoing packets are captured. The default setting is both.
```

```
# pcap filter [interface adapter_number:interface_number | all]
Specifies capture on the specified interface or on all interfaces. For example, 0:1. The interface number must be between 0 and 16. The default setting is all.
```

```
# pcap filter [expr filter_expression]
Specifies capture only when the filter expression matches.
```

pcap filter

No filtering specified (captures all packets in both directions---on all interfaces).

For More Information

□ Volume 10: Managing the Blue Coat SG Appliance.

Example

This example configures packet capturing in both directions, on all interfaces, to or from port 3035:

```
# pcap filter direction both interface all expr "port 3035"
```

To verify the settings before starting PCAP, enter pcap info:

```
SGOS# pcap info
Current state:
                                    Stopped
Filtering:
                                         On
                direction both interface all expr "port 3035"
Filter:
Packet capture information:
Packets captured:
                                          0
Bytes captured:
                                          0
Packets written:
                                          0
Bytes written:
                                          0
Coreimage ram used:
                                          0B
Packets filtered through:
```

pcap # prap # prap # prap filter

To start PCAP, enter pcap start. Then run pcap info to view the results of the packet capture.

```
SGOS# pcap start
 ok
SGOS# pcap info
Current state:
                                    Capturing
Filtering:
                                         On
Filter:
                direction both interface all expr "port 3035"
Packet capture information:
first count 4294967295 capsize 100000000 trunc 4294967295 coreimage 0
Packets captured:
                                       2842
Bytes captured:
                                     237403
Packets written:
                                       2836
Bytes written:
                                     316456
Coreimage ram used:
                                          0B
Packets filtered through:
                                       8147
```

After PCAP is stopped (using the pcap stop command), enter pcap info to view the results of your PCAP session. You should see results similar to the following:

SGOS# pcap info

Current state: Stopped Filtering: On

Filter: direction both interface all expr "port 3035"

Packet capture information:

Packets captured: 5101
Bytes captured: 444634
Packets written: 5101
Bytes written: 587590
Coreimage ram used: 0B
Packets filtered through: 10808

pcap # prap # prap start

pcap start

Synopsis

Start packet capture. The pcap start options are not persistent across reboots. You must reconfigure them if you reboot the system.

Syntax

```
# pcap start [subcommands]
```

Subcommands

[buffering-method]

```
Syntax: [first | last] { [count <N>] | [capsize <NKB>] }
```

The buffering method specifies how captured packets are buffered in memory. The amount of packets buffered cannot exceed a hard limit of 100MB.

```
[count] and [capsize]
```

The count option specifies that the buffer limit is controlled by the number of packets stored in the buffer. The value of count must be between 1 and 1000000.

The capsize option specifies that the buffer limit is controlled by the total number of bytes of packets stored in the buffer. The capsize value must be between 1 and 102400.

Note: The capsize n option is an approximate command; it captures an approximate number of packets. The actual size of the file written to disk is a little larger than the capsize value because of extra packet information such as time-stamps. If no parameters are specified, the default is to capture until the stop subcommand is issued or the maximum limit reached.

[first] and [last]

The first and last options affect the buffering behavior when the buffer is full. When first is specified, PCAP stops when the buffer limit is exceeded. When last is specified, PCAP continues capturing even after the buffer limit has been exceeded. The oldest captured packets are removed from buffer to make space for the newly captured packets: In this way, PCAP captures the last N (or N K bytes of) packets. The saved packets in memory are written to disk when the capture is terminated.

The packet capture file size is limited to 1% of total RAM, which might be reached before n packets have been captured.

Note: The first option is a specific command; it captures an exact number of packets. If no parameters are specified, the default is to capture until the stop subcommand is issued or the maximum limit reached.

[coreimage n]

Specifies kilobytes of packets kept in a core image. The coreimage size must be between 0 and 102400. By default, no packets are kept in the core image.

[trunc n]

The trunc n parameter collects, at most, n bytes of packets from each frame when writing to disk. The range is 1 to 65535.

pcap # prap # prap start

For More Information

Volume 10: Managing the Blue Coat SG Appliance.

Example 1

The following command captures the first 2000 packets that match the filtering expression:

```
# pcap start first count 2000
```

Note that the first option configures PCAP to stop capturing after the buffer limit of 2000 packets has been reached. If the last option had been specified, PCAP keeps capturing packets even after the buffer limit had been exceeded, until halted by the pcap stop command.

Example 2

The following command stops the capturing of packets after approximately three kilobytes of packets have been collected.

SGOS# pcap start first capsize 3

ping # ping

ping

Synopsis

Use this command to verify that a particular IP address exists and can accept requests. Ping output also tells you the minimum, maximum, and average time it took for the ping test data to reach the other computer and return to the origin.

Syntax

```
# ping {ip_address | hostname}
```

where ip_address is the IP address and hostname is the hostname of the remote computer.

```
SGOS# ping 10.25.36.47

Type escape sequence to abort.

Sending 5, 64-byte ICMP Echos to 10.25.36.47, timeout is 2 seconds:
!!!!!

Success rate is 100 percent (5/5), round-trip min/avg/max = 0/0/0 ms

Number of duplicate packets received = 0
```

policy # policy

policy

Synopsis

Use this command to configure policy commands.

Note: Configuring the policy command to trace all transactions by default can significantly degrade performance and should only be used in situations where a problem is being diagnosed.

Syntax

```
# policy trace {all | none}
```

Use all to trace all transactions by default, and use none to specify no tracing except as specified in policy files.

```
policy trace all
   ok
All requests will be traced by default;
Warning: this can significantly degrade performance.
Use 'policy trace none' to restore normal operation
SGOS# policy trace none
   ok
```

purge-dns-cache # purge-dns-cache

purge-dns-cache

Synopsis

This command clears the DNS cache. You can purge the DNS cache at any time. You might need to do so if you have experienced a problem with your DNS server, or if you have changed your DNS configuration.

Syntax

purge-dns-cache

The purge-dns-cache command has no parameters or subcommands.

Example

SGOS# purge-dns-cache ok

restart # restart

restart

Synopsis

Restarts the system. The restart options determine whether the SG appliance should simply reboot the SG appliance (regular), or should reboot using the new image previously downloaded using the load upgrade command (upgrade).

Syntax

restart [subcommands]

Subcommands

restart abrupt

Reboots the system abruptly, according to the version of the SG appliance that is currently installed. Restart abrupt saves a core image. Note that the restart can take several minutes using this option.

restart regular

Reboots the version of the SG appliance that is currently installed

restart upgrade

Reboots the entire system image and allows you to select the version you want to boot, not limited to the new version on the system.

For More Information

```
□ # load on page 57
```

```
SGOS# restart upgrade
   ok
SGOS# Read from remote host 10.9.17.159: Connection reset by peer
Connection to 10.9.17.159 closed.
```

restore-sgos4-config

Restores the SG appliance to settings last used with SGOS 4.x. The SG appliance retains the network settings. Note that a reboot is required to complete this command.

Syntax

```
# restore-sgos4-config
```

Example

```
SGOS# restore-sgos4-config Restoring SGOS 4.x configuration requires a restart to take effect. The current configuration will be lost and the system will be restarted. Continue with restoring? (y/n)[n]:y Restoring configuration ...
```

Or if there is no SGOS 4.x configuration found:

```
SGOS# restore-sgos4-config
%% No SGOS 4.x configuration is available on this system.
```

For More Information

```
# restore-defaults on page 69
```

restore-defaults # restore-defaults

restore-defaults

Synopsis

Restores the SG appliance to the default configuration. When you restore system defaults, the SG appliance's IP address, default gateway, and the DNS server addresses are cleared. In addition, any lists (for example, forwarding or bypass) are cleared. After restoring system defaults, you need to restore the SG appliance's basic network settings, as described in *Volume 10: Managing the Blue Coat SG Appliance*, and reset any customizations.

Syntax

restore-defaults [subcommands]

Subcommands

restore-defaults factory-defaults

Reinitializes the SG appliance to the original settings it had when it was shipped from the factory

restore-defaults force

Restores the system defaults without confirmation.

If you don't use the force command, you are prompted to enter yes or no before the restoration can proceed.

restore-defaults keep-console [force]

Restores defaults except settings required for console access. Using the keep-console option retains the settings for all consoles (Telnet-, SSH-, HTTP-, and HTTPS-consoles), whether they are enable, disabled, or deleted.

If you use the force command, you are not prompted to enter yes or no before restoration can proceed.

For More Information

□ Volume 10: Managing the Blue Coat SG Appliance

Example

SGOS# restore-defaults

Restoring defaults requires a restart to take effect. The current configuration will be lost and the system will be restarted. Continue with restoring? (y/n)[n]:n Existing configuration preserved.

reveal-advanced # reveal-advanced

reveal-advanced

Synopsis

The reveal-advanced command allows you to enable all or a subset of the advanced commands available to you when using the CLI. You can also use SGOS#(config) hide-advanced $\{all \mid expand\}$ to reveal hidden commands.

Syntax

```
# reveal-advanced [subcommands]
```

Subcommands

```
# reveal-advanced all Reveals all advanced commands.
```

reveal-advanced expand
Enables expanded commands.

For More Information

```
□ # hide-advanced on page 52
```

```
\begin{array}{c} {\tt SGOS\#} \  \, {\tt reveal-advanced} \  \, {\tt all} \\ {\tt ok} \end{array}
```

show # show

show

The # show command displays all the show commands available in the standard mode plus the show commands available only in privileged mode and configuration mode. Only show commands available in privileged mode are discussed here. For show commands also available in the standard mode, see > show on page 20.

Synopsis

Use this command to display system information.

Syntax

show [subcommands]

Subcommands

- # show archive-configuration
 Displays archive configuration settings.
- # show adn

Displays ADN configuration.

- # show attack-detection on page 74 Displays client attack-detection settings.
- # show configuration on page 75
 Displays system configuration.
- # show connection-forwarding

Displays TCP connection forwarding status and peer IP address list.

show content on page 76

Displays content-management commands.

- # show content-filter {bluecoat | i-filter | intersafe | iwf | local | optenet |
 proventia | smartfilter | surfcontrol | status | websense | webwasher}

 Shows settings for Blue Coat Web Filter or the various third-party content-filtering vendors. You can get
 information on current content-filtering status by using the # show content-filter status
 command.
- # show proxy-services on page 77
 Displays information on static and dynamic bypass and proxy-service behavior.
- # show realms

Displays the status of each realm.

- # show security on page 78 Displays security settings.
- # show ssh on page 79
 Displays SSH settings.
- # show sg-client

Displays SG Client settings.

show ssl on page 80

Also available in standard mode, the # show ssl command offers more options in privileged mode.

show system-resource-metrics

Displays system resource statistics.

show # show

```
# show archive-configuration
Archive configuration
 Protocol: FTP
 Host:
 Path:
 Filename:
 Username:
 Password: ********
# show content-filter status
Provider:
                                Blue Coat
Status:
                                Database unavailable
Download URL:
https://list.bluecoat.com/bcwf/activity/download/bcwf.db
Download Username:
Automatic download:
                                Enabled
Download time of day (UTC):
                                0
Download on:
                                sun, mon, tue, wed, thu, fri, sat
Category review message:
                               Disabled
Dynamic Categorization Service: Enabled
Dynamic Categorization Mode:
                                Real-time
Download log:
 Blue Coat download at: Sat, 18 Mar 2006 01:57:24 UTC
 Downloading from https://list.bluecoat.com/bcwf/activity/download/bcwf.db
 Requesting differential update
 Differential update applied successfully
 Download size:
                     84103448
 Database date:
                     Thu, 09 Feb 2006 08:11:51 UTC
 Database expires: Sat, 11 Mar 2006 08:11:51 UTC
 Database version:
                     2005040
# show realms
Local realm:
 No local realm is defined.
RADIUS realm:
 Realm name:
                                 RADIUS1
 Display name:
                                RADIUS1
 Case sensitivity:
                                enabled
 Primary server host:
                                10.9.59.210
 Primary server port:
                                1812
                                ******
 Primary server secret:
 Alternate server host:
 Alternate server port:
                                1812
                                 *****
 Alternate server secret:
                                 5
 Server retry count:
 Cache duration:
                                 900
 Virtual URL:
 Server timeout:
 Spoof authentication:
                                 none
 One time passwords:
                                 no
LDAP realm(s):
 No LDAP realms are defined.
```

show # show adn

show adn

Synopsis

Displays ADN settings and statistics.

Syntax

```
# show adn [subcommands]
```

Subcommands

```
# show adn byte-cache
Displays ADN byte-cache settings.
```

- # show adn routing [advertise-internet-gateway | server-subnets]
 Displays ADN routing settings.
- # **show adn tunnel**Displays ADN tunnel configuration.

For More Information

□ Volume 6: Advanced Networking

Example

```
# show adn
Application
```

```
Application Delivery Network Configuration:
                           disabled
                           3034
 Manager port:
 Tunnel port:
                             3035
 Primary manager:
                    none
 Backup manager:
                     none
 External VIP:
                                  none
 Byte-cache Configuration:
   Max number of peers: 10347
   Max peer memory:
                          30
Tunnel Configuration:
 proxy-processing http: disabled
 TCP window size:
                             65536
 reflect-client-ip :
                                     use-local-ip
Routing Configuration:
 Internet Gateway:
                               disabled
 Exempt Server subnet:
                         10.0.0.0/8
```

172.16.0.0/16

192.168.0.0/16

Exempt Server subnet:
Exempt Server subnet:

show attack-detection

show attack-detection

Synopsis

Displays client attack-detection settings and client and server statistics.

Syntax

```
# show attack-detection [subcommands]
```

Subcommands

```
client [blocked | connections | statistics]
    Displays client attack-detection settings.
client configuration
    Displays attack-detection configuration.
server [statistics]
    Displays server statistics
```

For More Information

□ Volume 6: Advanced Networking

show configuration

Synopsis

Displays the current configuration, as different from the default configuration.

Syntax

```
# show configuration [subcommands]
```

show configuration post-setup

Subcommands

```
# show configuration
   Displays all settings
# show configuration brief
   Displays the configuration without inline expansion.
# show configuration expanded
   Displays the configuration with inline expansion.
# show configuration noprompts
   Displays the configuration without --More-- prompts.
```

Displays the configuration made after console setup.

Example

Assuming non-default settings of:

```
□ policy = <Proxy> DENY
□ IP address of 10.167.42.38

# show configuration brief
interface 0:0; mode
ip-address 10.167.42.38
exit

# show configuration expanded
interface 0:0; mode
ip-address 10.167.42.38
exit
!
inline policy local "end-326998078-inline"
<Proxy>
DENY
end-326998078-inline
```

show # show content

show content

Synopsis

Displays content-management commands.

Syntax

show content [subcommands]

Subcommands

- # show content outstanding-requests
 Displays the complete list of outstanding asynchronous content revalidation and distribute requests;
- # show content priority [regex regex | url url]
 displays the deletion priority value assigned to the regex or url, respectively
- # **show content url** *url*Displays statistics of the specified URL.

For More Information

□ Volume 8: Managing Content

show proxy-services

Synopsis

Information about proxy services

Syntax

show proxy-services [subcommands]

Subcommands

- # show proxy-services
 Displays all proxy services configured on the system.
- # show proxy-services dynamic-bypass
 Displays dynamic-bypass information.
- # show proxy-services services bypass
 Display services containing a bypass action.
- # show proxy-services services intercept
 Display services containing an intercept action.
- # show proxy-services services name
 Display services with name substring match.
- # show proxy-services services proxy
 Display services using a specific proxy.
- # show proxy-services static-bypass
 Displays static-bypass information.

For More Information

□ Volume 3: Proxies and Proxy Services

show # show security

show security

Synopsis

Displays information about security parameters.

Syntax

```
# show security [subcommands]
```

Subcommands

```
# show security
```

Displays all security settings on the system.

show security authentication-forms

Displays authentication forms configured on the system.

show security local-user-list

Displays the local user list configured on the system.

show security local-user-list-group
Displays the groups in local user list.

show security local-user-list-user
User in local user list

For More Information

show security

□ Volume 5: Securing the Blue Coat SG Appliance

Example

Account:

```
"admin"
 Username:
 Hashed Password: $1$it$24YXwuAGbmvQl7zhaeG5u.
 Hashed Enable Password: $1$U1JZbCl1$itmTNhAwhymF2BNwBnum1/
 Hashed Front Panel PIN: "$1$50KI$KRORtYxQ102Z26cLy.Pq5."
 Management console display realm name: ""
 Management console auto-logout timeout: 900 seconds
Access control is disabled
Access control list (source, mask):
Flush credentials on policy update is enabled
Default authenticate.mode: auto
Transparent proxy authentication:
 Method: cookie
 Cookie type: session
 Cookie virtual-url: "www.cfauth.com/"
 IP time-to-live: 15
```

Volume 12: Command Line Interface Reference

Verify IP: yes Allow redirects: no # show # show ssh

show ssh

Synopsis

Displays the SSH service details.

Syntax

show ssh [subcommands]

Subcommands

show ssh client-key [username]

Displays the client key fingerprint for the specified username.

Note: If you upgraded from an older version of the SG appliance, you might not need to enter a username.

show ssh director-client-key [key id]

Displays all client key fingerprints or the client key fingerprint of the specified key ID.

show ssh host-public-key [sshv1 | sshv2]

Displays the sshv1 or sshv2 host public key. Both keys are displayed if you do not specify a version.

show ssh user-list

Displays a list of users with imported RSA client keys.

show ssh versions-enabled

Displays which SSH version or versions are enabled.

For More Information

- □ Volume 2: Getting Started
- Volume 3: Proxies and Proxy Services

Example

show ssh versions-enabled

SSHv2 is enabled.

show # show ssl

show ssl

Synopsis

Displays SSL settings.

Syntax

show ssl [subcommands]

Subcommands

show ssl ca-certificate name

Displays the CA certificate configuration

show ssl ccl [list name]

Displays currently configured CA certificate lists or configuration for the specified list_name. This option can also be viewed from standard mode.

show ssl certificate keyring_id

Displays the certificate configuration for the specified keyring.

show ssl crl crl_id

Displays the SSL certificate Revocation List (CRL) of the specified ID.

show ssl external-certificate name

Displays external certificate configuration of the specified name.

show ssl intercept

Displays the SSL intercept configuration.

show ssl keypair {des | des3 | unencrypted} keyring_id

Displays the keypair. If you want to view the keypair in an encrypted format, you can optionally specify des or des3 before the keyringID. If you specify either des or des3, you are prompted for the challenge entered when the keyring was created.

show ssl keyring [keyring_id]

Displays all keyrings or the keyring of the specified ID.

show ssl secure-signing-request keyring_id

Displays signed certificate signing request for the specified keyring.

show ssl signing-request keyring_id

Displays the certificate signing request configuration for the specified keyring.

show ssl ssl-client [ssl_client]

Displays information about all SSL clients or the specified SSL client. This option can also be viewed from standard mode.

show ssl ssl-nego-timeout

Displays the SSL negotiation timeout configuration.

show ssl summary {ca-certificate | crl | external-certificate}

Displays the SSL summary information for CA certificates, CRLs, or external certificates.

For More Information

□ Volume 3: Proxies and Proxy Services

show ssl

Example

show ssl keyring

KeyringID: configuration-passwords-key
Is private key showable? yes
Have CSR? no
Have certificate? no
KeyringID: default
Is private key showable? yes
Have CSR? no
Have certificate? yes
Is certificate date range valid? yes
CA: Blue Coat SG200 Series
Expiration Date: Mar 02 22:25:32 2016 GMT
Fingerprint: B2:DE:C4:98:58:18:3C:E3:B3:4A:1C:FC:AB:B5:A4:74

temporary-route # temporary-route

temporary-route

This command is used to manage temporary route entries. After a reboot these routes are lost.

Syntax

temporary-route [subcommands]

Subcommands

- # temporary-route add destination_address netmask gateway_address
 Adds a temporary route entry.
- # temporary-route delete destination_address
 Deletes a temporary route entry.

test # test

test

This command is used to test subsystems. A test http get command to a particular origin server or URL, for example, can verify Layer 3 connectivity and also verify upper layer functionality.

Syntax

```
# test http [subcommands]
```

Subcommands

```
SGOS# test http loopback
Type escape sequence to abort.
Executing HTTP loopback test
Measured throughput rate is 16688.96 Kbytes/sec
HTTP loopback test passed
SGOS# test http get http://www.google.com
Type escape sequence to abort.
Executing HTTP get test
* HTTP request header sent:
GET http://www.google.com/ HTTP/1.0
Host: www.google.com
User-Agent: HTTP_TEST_CLIENT
* HTTP response header recv'd:
HTTP/1.1 200 OK
Connection: close
Date: Tue, 15 Jul 2003 22:42:12 GMT
Cache-control: private
Content-Type: text/html
Server: GWS/2.1
Content-length: 2691
Set-Cookie:
PREF=ID=500ccde1707c20ac:TM=1058308932:LM=1058308932:S=du3WuiW7FC_lJ
Rgn; expires=Sun, 17-Jan-2038 19:14:07 GMT; path=/; domain=.google.com
Measured throughput rate is 66.72 Kbytes/sec
HTTP get test passed
```

traceroute # traceroute

traceroute

Use this command to trace the route to a destination. The traceroute command can be helpful in determining where a problem might lie between two points in a network. Use traceroute to trace the network path from a SG appliance back to a client or to a specific origin Web server.

Note that you can also use the trace route command from your client station (if supported) to trace the network path between the client, a SG appliance, and a Web server. Microsoft operating systems generally support the trace route command from a DOS prompt. The syntax from a Microsoft-based client is: tracert [ip | hostname].

Syntax

traceroute [subcommands]

Subcommands

- # traceroute *IP_address*Indicates the IP address of the client or origin server.
- # traceroute hostname
 Indicates the hostname of the origin server.

```
SGOS# traceroute 10.25.36.47

Type escape sequence to abort.

Executing HTTP get test

HTTP response code: HTTP/1.0 503 Service Unavailable

Throughput rate is non-deterministic

HTTP get test passed

10.25.36.47# traceroute 10.25.36.47

Type escape sequence to abort.

Tracing the route to 10.25.36.47

1 10.25.36.47 212 0 0 0
```

upload # upload

upload

Uploads the current access log or running configuration.

Syntax

```
# upload {subcommands}
```

Subcommands

```
# upload access-log all
Uploads all access logs to a configured host.
```

```
# upload access-log log log_name
Uploads a specified access log to a configured host.
```

upload configuration
Uploads running configuration to a configured host.

```
\begin{array}{ll} {\tt SGOS\#} \ \ \textbf{upload} \ \ \textbf{configuration} \\ {\tt ok} \end{array}
```

upload # upload

Chapter 3: Privileged Mode Configure Commands

Configure Commands

The configure command allows you to configure the Blue Coat SG appliance settings from your current terminal session (configure terminal), or by loading a text file of configuration settings from the network (configure network).

Syntax

```
configure {terminal | network url}
configure_command
configure_command
.
.
```

where <code>configure_command</code> is any of the configuration commands in this document. Type a question mark after each of these commands for a list of subcommands or options with definitions.

#(config) accelerated-pac

Synopsis

Set the path to download PAC files.

Discussion

Normally, a Web server serves the Proxy Auto-Configuration (PAC) file to client browsers. This feature allows you to load a PAC file onto the SG appliance for high performance PAC file serving right from the device. There are two ways to create an accelerated PAC file:

- customize the default PAC file and save it as a new file
- Create a new custom PAC file.

In either case, it is important that the client instructions for configuring SG appliance settings contain the URL of the Accelerated-PAC file. Clients load PAC files from:

```
https://SG_IP_Address:8082/accelerated_pac_base.pac.
```

Syntax

```
#(config) accelerated-pac no path
   Clears the network path to download PAC file.

#(config) accelerated-pac path url
   Specifies the location to which the PAC file should be downloaded.
```

For More Information

- # inline on page 53
 # load on page 57
- Volume 3: Proxies and Proxy Services

```
#(config) accelerated-pac path url
#(config) load accelerated-pac
```

#(config) access-log #(config) access-log

#(config) access-log

Synopsis

The SG appliance can maintain an access log for each HTTP request made. The access log can be stored in one of three formats, which can be read by a variety of reporting utilities.

Syntax

```
#(config) access-log
This changes the prompt to:
#(config access-log)
```

Subcommands

```
#(config access-log) create log log name
   Creates an access log.
#(config access-log) create format format name
   Creates an access log format.
#(config access-log) cancel-upload all
   Cancels upload for all logs.
#(config access-log) cancel-upload log log_name
   Cancels upload for a log
#(config access-log) default-logging {cifs | epmapper | ftp | http |
   https-forward-proxy | https-reverse-proxy | icp | im | mapi | mms | p2p | rtsp
   socks | ssl | tcp-tunnel | telnet | log_name
   Sets the default log for the specified protocol.
#(config access-log) delete log log name
   Deletes an access log.
#(config access-log) delete format format name
   Deletes an access log format.
#(config access-log) disable
   Disables access logging.
#(config access-log) early-upload megabytes
   Sets the log size in megabytes that triggers an early upload.
#(config access-log) edit log log name—changes the prompt (see # (config log
   log name) on page 92)
#(config access-log) edit format format name—changes the prompt (see #(config format
   format name) on page 96)
#(config access-log) enable
   Enables access logging.
#(config access-log) exit
   Exits #(config access-log) mode and returns to #(config) mode.
#(config access-log) max-log-size megabytes
   Sets the maximum size in megabytes that logs can reach.
```

#(config) access-log #(config) access-log

```
#(config access-log) no default-logging {cifs | epmapper | ftp | http |
   https-forward-proxy | https-reverse-proxy | icp | im | mapi | mms | p2p | rtsp
   | socks | ssl | tcp-tunnel | telnet}
   Disables default logging for the specified protocol.
#(config access-log) overflow-policy delete
   Deletes the oldest log entries (up to the entire log).
#(config access-log) overflow-policy stop
   Stops access logging until logs are uploaded.
#(config access-log) upload all
   Uploads all logs.
#(config access-log) upload log log_name
   Uploads a log.
#(config access-log) view
   Shows access logging settings.
#(config access-log) view [log [brief | log name]]
   Shows the entire access log configuration, a brief version of the access log configuration, or the
   configuration for a specific access log.
#(config access-log) view [format [brief | format_name]]
   Shows the entire log format configuration, a brief version of the log format configuration, or the
   configuration for a specific log format.
#(config access-log) view [statistics [log name]]
   Shows access log statistics for all logs or for the specified log.
#(config access-log) view [default-logging]
   Shows the access log default policy
```

For More Information

- □ Volume 6: Advanced Networkingg
- □ Volume 9: Access Logging

SGOS#(config) access-log

Example

```
ok
   SGOS#(config access-log) max-log-size 1028
   SGOS#(config access-log) overflow-policy delete
View the results. (This is a partial output.)
   SGOS#(config access-log) view log
   Settings:
   Log name: main
   Format name: main
   Description:
   Logs uploaded using FTP client
   Logs upload as gzip file
   Wait 60 seconds between server connection attempts
   FTP client:
   Filename format: SG_%f_%l%m%d%H%M%S.log
   Filename uses utc time
   Use PASV: yes
```

SGOS#(config access-log) create log test

Use secure connections: no
Primary host site:
Host:
Port: 21
Path:
Username:
Password: **********
Alternate host site:
Host:
Port: 21

Path:

#(config log log_name)

Synopsis

Use these commands to edit an access log.

Syntax

```
#(config) access-log
This changes the prompt to:
    #(config access-log)
    #(config access-log) edit log log_name
This changes the prompt to:
    #(config log log_name)
```

Subcommands

#(config log log_name) bandwidth-class bwm_class_name
Specifies a bandwidth-management class for managing the bandwidth of this log. In order to bandwidth-manage this log, bandwidth management must be enabled. Bandwidth management is enabled by default.

Note: You must also create a bandwidth class for this access log (in bandwidth-management mode) before you can select it here. See #(config) bandwidth-management on page 117 for more information

```
#(config log log_name) client-type custom
   Uploads log using the custom client.
#(config log log_name) client-type ftp
    Uploads log using the FTP client.
#(config log log name) client-type http
   Uploads log using the HTTP client.
#(config log log name) client-type none
   Disables uploads for this log
#(config log log_name) client-type websense
    Uploads log using the Websense client.
#(config log log name) commands cancel-upload
   Disables uploads for this log.
#(config log log name) commands close-connection
   Closes a manually opened connection to the remote server.
#(config log log_name) commands delete-logs
   Permanently deletes all access logs on the SG appliance.
#(config log log_name) commands open-connection
   Manually opens a connection to the remote server.
#(config log log_name) commands rotate-remote-log
   Switches to a new remote log file.
#(config log log name) commands send-keep-alive
   Sends a keep-alive log packet to the remote server.
```

```
#(config log log name) commands test-upload
   Tests the upload configuration by uploading a verification file.
#(config log log name) commands upload-now
   Uploads access log now.
#(config log log_name) connect-wait-time seconds
   Sets time to wait between server connect attempts.
#(config log log name) continuous-upload
#(config log log_name) continuous-upload enable
   Uploads access log continuously to remote server.
#(config log log name) continuous-upload keep-alive seconds
   Sets the interval between keep-alive log packets
#(config log log name) continuous-upload lag-time seconds
   Sets the maximum time between log packets (text upload only).
#(config log log name) continuous-upload rotate-remote {daily rotation hour
    (0-23) | hourly hours [minutes] }
   Specifies when to switch to new remote log file.
#(config log log_name) custom-client alternate hostname [port]
   Configures the alternate custom server address.
#(config log log name) custom-client primary hostname [port]
   Configures the primary custom server address.
#(config log log_name) custom-client secure {no | yes}
   Selects whether to use secure connections (SSL). The default is no. If yes, the hostname must match the
   hostname in the certificate presented by the server.
#(config log log_name) description description
   Sets the log description.
#(config log log name) early-upload megabytes
   Sets log size in megabytes that triggers an early upload.
#(config log log name) encryption certificate certificate name
   Specifies access-log encryption settings.
#(config log log name) exit
   Exits #(config log log name) mode and returns to #(config access-log) mode.
#(config log log_name) format-name format_name
   Sets the log format.
#(config log log name) ftp-client alternate {encrypted-password
   encrypted password | host hostname [port] | password password | path path |
   username username}
   Configures the alternate FTP host site.
#(config log log_name) ftp-client filename format
   Configures the remote filename format
#(config log log name) ftp-client no {alternate | filename | primary}
   Deletes the remote filename format or the alternate or primary host parameters.
#(config log log name) ftp-client pasv {no | yes}
   Sets whether PASV or PORT command is sent.
#(config log log_name) ftp-client primary {encrypted-password encrypted_password
    | host hostname [port] | password password | path path | username username}
   Configures the primary FTP host site.
```

```
#(config log log name) ftp-client secure {no | yes}
   Selects whether to use secure connections (FTPS). The default is no. If yes, the hostname must match
   the hostname in the certificate presented by the server.
#(config log log name) ftp-client time-format {local | utc}
   Selects the time format to use within upload filename.
#(config log log name) http-client alternate {encrypted-password
    encrypted password | host hostname [port] | password password | path path |
    username username}
   Configures the alternate HTTP host site.
#(config log log name) http-client filename format
   Configures the remote filename format.
#(config log log_name) http-client no {alternate | filename | primary}
   Deletes the remote filename format or the alternate or primary host parameters.
#(config log log_name) http-client primary {encrypted-password encrypted_password
     host hostname [port] | password password | path path | username username}
   Configures the primary HTTP host site.
#(config log log name) http-client secure {no | yes}
   Selects whether to use secure connections (HTTPS). The default is no. If yes, the hostname must match
    the hostname in the certificate presented by the server
#(config log log name) http-client time-format {local | utc}
   Selects the time format to use within upload filename.
#(config log log name) no {encryption | bandwidth-class | signing}
   Disables access-log encryption, bandwidth management, or digital signing for this log.
#(config log log name) periodic-upload enable
   Uploads access log daily/hourly to remote server.
#(config log log_name) periodic-upload upload-interval {daily upload_hour (0-23)
    | hourly hours [minutes] }
   Specifies access log upload interval.
#(config log log_name) remote-size megabytes
   Sets maximum size in MB of remote log files.
#(config log log name) signing keyring id
   Specifies the keyring to be used for digital signatures.
#(config log log_name) upload-type {gzip | text}
   Sets upload file type (gzip or text).
#(config log log_name) view
   Shows log settings.
#(config log log_name) websense-client
   Configures the alternate websense server address.
#(config log log_name) websense-client alternate hostname [port]
   Configures the alternate websense server address.
#(config log log name) websense-client no {primary | alternate}
   Deletes the primary or alternate websense server information.
#(config log log name) websense-client primary hostname [port]
   Configures the primary websense server address.
```

For More Information

- □ #(config) access-log on page 89
- □ Volume 9: Access Logging

```
SGOS#(config) access-log
SGOS#(config access-log) edit log testlog
SGOS#(config log testlog) upload-type gzip
ok
SGOS#(config log testlog) exit
SGOS#(config access-log) exit
SGOS#(config)
```

#(config format format_name)

Synopsis

Use these commands to edit an access log format.

Syntax

```
#(config) access-log
This changes the prompt to:
    #(config access-log) edit format format_name
This changes the prompt to:
    #(config format format_name)
```

Subcommands

```
#(config format format_name) exit
    Exits #(config format format_name) mode and returns to #(config access-log) mode.
#(config format format_name) multi-valued-header-policy log-all-headers
    Sets multi-valued header policy to log all headers.
#(config format format_name) multi-valued-header-policy log-first-header
    Sets multi-valued header policy to log the first header.
#(config format format_name) multi-valued-header-policy log-last-header
    Sets multi-valued header policy to log the last header.
#(config format format_name) type custom format_string
    Specifies custom logging format.
#(config format format_name) type elff format_string
    Specifies W3C extended log file format.
#(config format format_name) view
    Shows the format settings.
```

For More Information

- □ #(config) access-log on page 89
- □ Volume 9: Access Logging

```
SGOS#(config) access-log
SGOS#(config access-log) edit format testformat
SGOS#(config format testformat) multi-valued-header-policy log-all-headers
ok
SGOS#(config format testformat) exit
SGOS#(config access-log) exit
SGOS#(config)
```

#(config) adn

Synopsis

ADN optimization allows you to reduce the amount of tunneled TCP traffic across a WAN by means of an overlay network called an Application Delivery Network, or ADN. SG devices that participate in the ADN utilize byte caching technology, which replaces large chunks of repeated data with small tokens representing that data. SG devices in the ADN also use gzip compression to further reduce the amount of data flowing over the WAN.

Syntax

```
SGOS#(config) adn
The prompt changes to
   SGOS#(config adn)
```

Subcommands

```
SGOS#(config adn) byte-cache
   Configures byte caching parameters. The prompt changes to SGOS#(config adn byte-cache)
   SGOS#(config adn byte-cache) exit
       Exits the SGOS#(config adn byte-cache) submode and returns to SGOS#(config adn)
       mode.
   SGOS#(config adn byte-cache) peer-size peer-id {size in megabytes | auto}
       Manually sets the amount of memory used to keep track of the byte-cache hash table. Generally,
       the dynamic settings are acceptable; you do not need to change the dictionary size. Only if
       you determine that the algorithm performance does not guarantee a sufficient dictionary
       size for a specific peer should you manually set the dictionary size.
   SGOS#(config adn byte-cache) view
       Views the current configuration of the byte caching parameters.
SGOS#(config adn) {enable | disable}
   Enables or disables the ADN optimization network.
SGOS#(config adn) exit
   Exits the SGOS#(config adn) submode and returns to SGOS#(config) mode.
   SGOS#(config adn) load-balancing
       Configures load-balancing parameters. The prompt changes to SGOS#(config adn
       load-balancing).
       SGOS#(config adn load-balancing) {enable | disable}
           Enables or disables load-balancing functionality.
   SGOS#(config adn load-balancing) exit
       Exits the submode and returns to SGOS# (config adn) mode.
   SGOS#(config adn load-balancing) external-vip IP_address
       Sets the external VIP. The same VIP must be configured on each SG appliance in the cluster, and the
       VIP must exist on an external load balancing device. The external VIP is used in explicit external
       load balancing.
   SGOS#(config adn load-balancing) group group name
       Sets the group name for an ADN group. Groups are used in transparent load balancing.
   SGOS#(config adn load-balancing) load-balance-only {enable | disable}
       Specifies whether the node can take participate in load balancing (disable) or if it acts as a load
       balancer only (enable).
```

```
SGOS#(config adn load-balancing) no {external-vip | group}
       Removes the external VIP or group name.
   SGOS#(config adn load-balancing) view
       Views the load-balancing configuration.
SGOS#(config adn) manager
   Configures manager parameters. The prompt changes to SGOS# (config adn manager).
   SGOS#(config adn manager) approved-peers
       Configures approved-peers. The prompt changes to SGOS#(config adn approved-peers).
       SGOS#(config adn approved-peers) add peer-serial-number
       SGOS#(config adn approved-peers) exit
           Exits the SGOS# (config adn approved-peers) submode and returns to SGOS# (config
           adn manager) mode.
       SGOS#(config adn approved-peers) remove peer-serial-number
       SGOS#(config adn approved-peers) view [approved-peers | backup-manager-id
           | pending-peers | primary-manager-id]
           Views the list of approved devices and connections, as well as the device ID of the ADN
           manager and backup manager.
   SGOS#(config adn manager) backup-manager (IP address [device id] | self
       Defines the backup ADN manager. While optional, defining a backup ADN manager is highly
       recommended. If the primary ADN manager goes offline for any reason, routing updates are no
       longer available which prevent nodes from learning when other nodes enter and leave the network.
       Existing route information is still retained by the peers, however.
   SGOS#(config adn manager) exit
       Exits the SGOS# (config adn manager) submode and returns to SGOS# (config adn) mode.
   SGOS#(config adn manager) no {backup-manager | primary-manager}
       Clears the IP address of the specified ADN manager or backup manager.
   SGOS#(config adn manager) pending-peers
       Configures pending peers. The prompt changes to SGOS#(config adn pending-peers)
       SGOS#(config adn pending-peers) {accept | reject} {device-id | all}
           Allows or denies a specific peer or all peers that want to join a network.
       SGOS#(config adn pending-peers) {enable | disable}
           Enables or disables the pending-peers functionality.
       SGOS#(config adn pending-peers) exit
           Exits the SGOS# (config adn pending-peers) submode and returns to SGOS# (config
           adn manager) mode.
       SGOS#(config adn pending-peers) view
           Views the list of pending devices and connections.
   SGOS#(config adn manager) port port_number
       Sets the port number for the primary and backup ADN managers. All SG appliance devices in the
       ADN must use the same manager port number. The default is port 3034; it should not be changed.
   SGOS#(config adn manager) primary-manager IP address
       Defines the primary ADN manager. The responsibility of the ADN manager is to keep up to date the
       routing information from each SG appliance node on the WAN optimization network and to
       broadcast that information to all the peers.
   SGOS#(config adn manager) secure-port port number
   SGOS#(config adn manager) view
       Views the adn manager configuration.
```

```
SGOS#(config adn) routing
   Configures routing information. The prompt changes to SGOS# (config adn routing).
   SGOS#(config adn routing) advertise-internet-gateway
       Enters advertise-internet-gateway mode to enable the SG appliance as an Internet gateway.
       Changes the prompt to SGOS#(config adn advertise-internet-gateway).
       SGOS#(config adn routing advertise-internet-gateway) {disable | enable}
           Enables or disables the ability for this peer to be used as an Internet gateway.
       SGOS#(config adn routing advertise-internet-gateway) exempt-subnet {add
           {subnet_prefix[/prefix_length]} clear-all | remove
           {subnet prefix[/prefix length]} | view}
           Manages subnets t that must not be routed to Internet gateway(s).
       SGOS#(config adn routing advertise-internet-gateway) exit
           Leaves the advertise-internet-gateway submode and returns to the routing submode.
       SGOS#(config adn routing advertise-internet-gateway) view
           Displays the advertise-internet-gateway parameters.
       SGOS#(config adm routing) prefer-transparent {enable | disable}
           Forces peers to always use advertised routes or to allows them to use transparent routes if they
           are available.
   SGOS#(config adn routing) exit
       Exits the SGOS# (config adn routing) submode and returns to SGOS# (config adn) mode.
   SGOS#(config adn routing) server-subnets
       Configures server-subnets that will be advertised to other peers on the WAN optimization network.
       The prompt changes to SGOS#(config adm routing server-subnets).
       SGOS#(config adm routing server-subnets) add subnet prefix[/prefix length]
           Adds a subnet with the specified prefix and, optionally, the prefix length, to the SG appliance
           routes that it sends to the ADN manager.
       SGOS#(config adn routing server-subnets) clear-all
           Deletes all subnets listed on the system.
       SGOS#(config adn routing server-subnets) remove subnet_prefix[/prefix
           length]
           Removes the specified subnet from the system.
       SGOS#(config adn routing server-subnets) exit
           Exits the SGOS#(config adn routing server-subnets) submode and returns to
           SGOS#(config adn routing) submode.
       SGOS#(config adn routing server-subnets) view
           Views the current configuration of the server subnets.
   SGOS#(config adn routing) view
       Views the current parameters of the routing configuration.
SGOS#(config adn) security
   Configures authorization parameters. Changes the prompt to SGOS#(config adn security).
   SGOS#(config adn security) authorization {enable | disable}
       Enables connection authorization.
   SGOS#(config adn security) device-auth-profile profile name [no-authorization]
       Select the ADN device-auth profile name. The profile must already exist.
   SGOS#(config adn security) exit
       Leaves the security submode. Returns to (config adn) mode.
```

```
SGOS#(config adn security) manager-listening-mode {plain-only |
       plain-read-only | secure-only | both}
       Configure manager listening mode. Both refers to plain-only or secure-only.
    SGOS#(config adn security) no device-auth-profile
       Clears the profile name.
    SGOS#(config adn security) secure-outbound {none | routing-only|
       secure-proxies | all}
       Configure outbound connection encryption, where none indicates the encryption is disabled,
       routing-only enables encryption on outbound traffic, secure-proxies enables encryption on
       secure proxy (that is, HTTPS or SSL) traffic, and all indicates that encryption is enabled on all
       outbound connections.
    SGOS#(config adn security) tunnel-listening-mode {plain-only | secure-only|
       Starts the specified tunnel listening mode.
    SGOS#(config adn security) view
       View security configuration
SGOS#(config adn) tunnel
   Configures parameters for tunnel connections. Tunnel connections are established between ADN peers
   in order to carry optimized traffic over the WAN. Changes the prompt to SGOS# (config adn
    tunnel).
    SGOS#(config adn tunnel) connect-transparent {enable | disable}
       Control outbound ADN transparent tunnel initiation
    SGOS#(config adn tunnel) exit
       Exits the SGOS#(config adn tunnel) submode and returns to SGOS#(config adn) mode.
   SGOS#(config adn tunnel) preserve-dest-port {enable | disable}
       Preserve destination port on outbound connections
    SGOS#(config adn tunnel) port port_number
       Sets the port number for the client or data port used by ADN tunnel connections. Each ADN node
       has a TCP listener on this port in order to receive tunnel connections. The default is port 3035; it
       should not be changed.
    SGOS#(config adn tunnel) proxy-processing http {enable | disable}
       Enables HTTP handoff. This option should be used with care as both byte caching and object
       caching require significant resources. Be sure that your SG devices are sized correctly if you intend
       to use this option.
    SGOS#(config adn tunnel) reflect-client-ip (allow | deny | use-local-ip)
       Allows the concentrator proxy to follow, deny, or ignore the branch proxy reflect-client-ip settings.
   SGOS#(config adn tunnel) secure-port port number
       Configure listening port for secure ADN tunnel
    SGOS#(config adn tunnel) tcp-window-size
       Sets the window size used by TCP on all ADN tunnel connections. The default is 65536.
    SGOS#(config adn tunnel) view
       Views the current configuration ADN tunnel parameters.
SGOS#(config adn) view
    Views the configuration of the WAN optimization parameters you created on this system.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config adn)
SGOS#(config adn) enable
SGOS#(config adn) manager
SGOS#(config adn manager) primary-manager 10.25.36.47
SGOS#(config adn) backup-manager 10.25.36.48
SGOS#(config adn) tunnel
SGOS#(config adn tunnel) tcp-window-size 200000
SGOS#(config adn tunnel) exit
SGOS#(config adn) routing
SGOS#(config adn routing) server-subnets
SGOS#(config adn routing server-subnets) clear-all
SGOS#(config adn routing server-subnets) add 10.9.59.0/24
SGOS#(config adn routing server-subnets) exit
SGOS#(config adn routing) exit
SGOS#(config adn) byte-cache
SGOS#(config adn byte-cache) max-peer-memory 40
SGOS#(config adn byte-cache) exit
```

SGOS#(config adn) view

Application Delivery Network Configuration:

ADN: enabled External VIP: none

Manager Configuration:

Primary manager: self
Backup manager: none
Port: 3034
Secure port: 3036

Approved device Connecting from

Allow pending devices: enabled

Pending device Connecting from

Byte-cache Configuration:

Max number of peers: 10347 Max peer memory: 30

Tunnel Configuration:

Port: 3035
Secure port: 3037
proxy-processing http: disabled accept-transparent: enabled connect-transparent: enabled preserve-dest-port: enabled TCP window size: 65536

reflect-client-ip: use-local-ip

Routing Configuration:

Internet Gateway: disabled
Exempt Server subnet: 10.0.0.0/8
Exempt Server subnet: 172.16.0.0/12
Exempt Server subnet: 192.168.0.0/16

Security Configuration:

Device-auth-profile: bluecoat
Manager-listening mode: plain-only
Tunnel-listening mode: plain-only
Authorization: enabled
Secure-outbound: none

#(config) alert

Synopsis

Configures the notification properties of hardware environmental metrics (called *sensors*) and the threshold and notification properties of system resource health monitoring metrics. These *health monitoring* metrics enable Director (and other third-party network management tools) to provide a remote view of the health of the SG system.

Note: Sensor thresholds are not configurable.

Syntax

```
#(config) alert threshold metric_name warning_threshold warning_interval
critical_threshold critical_interval
#(config) alert notification metric name notification method
```

Subcommands

- #(config) alert threshold | notification cpu-utilization Sets alert threshold and notification properties for CPU utilization metrics.
- #(config) alert threshold | notification license-utilization license_type Sets alert threshold and notification properties for licenses with user limits.
- #(config) alert threshold | notification license-expiration license_type Sets alert threshold and notification properties for license expiration.
- #(config) alert threshold | notification memory-pressure Sets alert threshold and notification properties for memory pressure metrics.
- #(config) alert threshold | notification network-utilization adapter:interface Sets alert threshold and notification properties for interface utilization metrics.
- #(config) alert notification sensor sensor-type

 Sets alert notification properties for hardware environmentals. See "Sensors" on page 103 for a description of the sensor types.
- #(config) alert notification disk-status disk_number Sets alert notification properties for disk status messages.

Sensors

The following table describes the sensor metrics. The hardware and environmental metrics are referred to as sensors. Sensor threshold values are not configurable and are preset to optimal values. For example, if the CPU temperature reaches 55 degrees Celsius, it is considered to have entered the Warning threshold.

Table 3-1. Sensor Health Monitoring Metrics

Metric	MIB	Threshold States
Disk status	Disk	Critical:
		Bad
		Warning:
		Not Present
		Removed
		Offline
		OK:
		Present
		Initializing
		Inserted
		Slot_empty
Temperature	Sensor	High-critical
Bus temperature		High-warning
CPU temperature		
Fan	Sensor	Critical:
CPU Fan		Low-critical
		Warning:
		Low-warning
Voltage	Sensor	Critical:
Bus Voltage		critical
CPU voltage		high-critical
Power Supply voltage		low-critical
		Warning:
		high-warning
		low-warning

Thresholds

The following table describes the health monitoring metrics and default thresholds. Sensor thresholds cannot be set.

Table 3-2. System Resource Health Monitoring Metrics

Metric	Units	Threshold and Interval Defaults	Notes
CPU Utilization	Percentage	Critical: 95/120 Warning: 80/120	Measures the value of CPU 0 on multi-processor systemsnot the average of all CPU activity.
Memory Pressure	Percentage	Critical: 95/120 Warning: 90/120	Memory pressure occurs when memory resources become limited, causing new connections to be delayed.

Metric	Units	Threshold and Interval Defaults	Notes
Network Utilization	Percentage	Critical: 90/120 Warning: 60/120	Measures the traffic (in and out) on the interface to determine if it is approaching the maximum allowable bandwidth.
License Utilization	Percentage	Critical: 100/0 Warning: 90/0	For licenses that have user limits, monitors the number of users.
License Expiration	Days	Critical: 0/0 Warning: 30/0	Warns of impending license expiration. For license expiration metrics, intervals are ignored. Refer to <i>Volume 10: Managing the Blue Coat SG Appliance</i> for more information.

Table 3-2. System Resource Health Monitoring Metrics (Continued)

For the purposes of notification, thresholds are defined by two variables, the *threshold level* and the *threshold interval*:

■ The threshold level describes the state of the metric: OK, Warning, or Critical.

Note: Sensors have different threshold levels than OK, Warning, and Critical. See "Sensors" on page 103 for more information.

☐ The threshold interval specifies the period of time that the metric must stay in the level before an alert is triggered.

Consider the following command:

#(config) alert threshold cpu-utilization 80 20 90 20

The preceding command sets the cpu-utilization threshold values as follows:

- □ Warning Threshold=80 (percent)
- Warning Interval=20 (seconds)
- Critical Threshold=90 (percent)
- □ Critical Interval=20 (seconds)

In this example, if CPU activity hovers between 80% and 89% for 20 seconds, the cpu-utilization metric is considered to be in the Warning condition.

Notification occurs when a threshold state changes, for example, from OK to Warning. See "Notification Methods" on page 105 for more information.

Notification Methods

The following notification methods can be set. To set more than one type of notification, separate the notification method by spaces. For example:

sgos# alert notification license-utilization quicktime email log trap

Table 3-3. Alert Notification Methods

Method	Description
email	Notify using e-mail only
log	Notify using Event log only
trap	Notify using SNMP trap only
none	Disable notification

Licenses

The license utilization and expiration alert settings can be modified for the following licenses.

Table 3-4. Health Monitoring License Options

Method.	Description
aol-im	Alert properties for AOL Instant Messaging
msn-im	Alert properties for MSN Instant Messaging
quicktime	Alert properties for QuickTime Streaming
real-media	Alert properties for Real Media Streaming
windows-media	Alert properties for Windows Media Streaming
yahoo-im	Alert properties for Yahoo Instant Messaging
sgos	Alert properties for SGOS (expiration only)
ssl	Alert properties for SSL Proxy (expiration only)

The threshold values for license expiration metrics are set in days until expiration. In this context, a "critical" threshold indicates that license expiration is imminent. This is the only metric in which the Critical threshold value should be smaller than the Warning threshold value. For example, if you set the Warning threshold to 45, an alert is sent when there are 45 days remaining in the license period. The Critical threshold would be less than 45 days, for example 5 days.

For the license expiration metrics, the threshold interval is irrelevant and is set by default to 0. You should set the Warning Threshold to a value that gives you ample time to renew your license. By default, all license expiration metrics have a Warning Threshold of 30 days. By default, the Critical Threshold is configured to 0, which means that a trap is immediately sent upon license expiration.

For More Information

□ Volume 10: Managing the Blue Coat SG Appliance

```
#(config) alert threshold cpu-utilization 80 20 90 20
#(config) alert threshold license-utilization quicktime 80 20 90 20
#(config) alert threshold license-expiration quicktime 30 0 5 0
#(config) alert notification cpu-utilization trap
#(config) alert notification license-utilization quicktime email log trap
```

```
#(config) alert notification sensor fan email
#(config) alert notification sensor voltage trap
```

#(config) archive-configuration

Synopsis

Archiving a SG system configuration on a regular basis is always a good idea. In the rare case of a complete system failure, restoring an SG appliance to its previous state is simplified by loading an archived system configuration from an FTP, HTTP, or HTTPS server. The archive contains all system settings differing from system defaults, along with any forwarding and security lists installed on the SG appliance.

Archive and restore operations must be done from the CLI. There is no Management Console Web interface for archive and restore.

Syntax

```
#(config) archive-configuration [subcommands]
```

Subcommands

- #(config) archive-configuration encrypted-password encrypted_password
 Encrypted password for upload host (not required for TFTP)
- #(config) archive-configuration filename-prefix filename

 Specifies the prefix that should be applied to the archive configuration on upload.
- #(config) archive-configuration host hostname
 Specifies the FTP host to which the archive configuration should be uploaded.
- #(config) archive-configuration password password
 Specifies the password for the FTP host to which the archive configuration should be uploaded
- #(config) archive-configuration path path
 Specifies the path to the FTP host to which the archive configuration should be uploaded.
- #(config) archive-configuration protocol {ftp | tftp}
 Indicates the upload protocol to be used for the archive configuration using FTP or TFTP.
- #(config) archive-configuration username username

 Specifies the username for the FTP or FTP host to which the archive configuration should be uploaded.

For More Information

□ Volume 2: Getting Started

```
SGOS#(config) archive-configuration host host3 ok
```

#(config) attack-detection

Synopsis

The SG appliance can reduce the effects of distributed denial of service (DDoS) attacks and port scanning, two of the most common virus infections.

The SG appliance prevents attacks by limiting the number of TCP connections from each client IP address and either will not respond to connection attempts from a client already at this limit or will reset the connection.

Syntax

```
#(config) attack-detection
This changes the prompt to:
    #(config attack-detection)
```

Subcommands

```
#(config attack-detection) client
Changes the prompt to #(config client) on page 111.

#(config attack-detection) exit
Leaves #(config attack-detection) mode and returns to #(config) mode.

#(config attack-detection) server
Changes the prompt to #(config server) on page 114.

#(config attack-detection) view client [blocked | connections | statistics]
Displays client information. The blocked option displays the clients blocked at the network level, the connections option displays the client connection table, and the statistics option displays client request failure statistics.

#(config attack-detection) view configuration
Allows you to view attack-detection configuration settings or the number of current connections.

#(config attack-detection) view server [statistics]
Displays server information. The statistics option displays server-connection failure statistics
```

For More Information

□ Volume 6: Advanced Networking

```
#(config attack-detection) view configuration
Client limits enabled: false
Client interval: 20 minutes
Default client limits:
Client connection limit: 100
Client failure limit: 50
Client warning limit: 10
Blocked client action: Drop
Client connection unblock time: unlimited
```

Client limits for 10.9.59.210:

Client connection limit: 100
Client failure limit: 50
Client warning limit: 10
Blocked client action: Drop
Client connection unblock time: unlimited

#(config client)

Synopsis

Configures a client for attack detection.

Syntax

```
#(config attack-detection) client
This changes the prompt to
#(config client)
```

Subcommands

```
#(config client) block ip_address [minutes]

Blocks a specific IP address for the number of minutes listed. If the optional minutes argument is omitted, the client is blocked until explicitly unblocked.
```

```
#(config client) create ip_address or ip_address_and_length
    Creates a client with the specified IP address or subnet.
```

```
#(config client) default {block-action {drop | send-tcp-rst} | connection-limit
    number_of_tcp_connections | failure-limit number_of_requests | unblock-time
    minutes | warning-limit number_of_warnings}
```

Default indicates the values that are used if a client does not have specific limits set. These settings can over overridden on a per-client basis.

If they are modified on a per-client basis, the specified limits become the default for new clients. To change the limits on a per-client basis, see *edit*, below.

System defaults for attack-detection limits are:

- block-action: drop
- connection-limit: 100
- failure-limit: 50
- unblock-time: unlimited
- warning-limit: 10

```
#(config client) delete ip_address or ip_address_and_length
Deletes the specified client.
```

```
#(config client) disable-limits
```

Disables attack detection.

```
#(config client) edit ip address
```

Changes the prompt to #(config client ip_address).

```
#(config client IP_address) block-action {drop | send-tcp-rst}
```

Indicates the behavior when the client is at the maximum number of connections or exceed the warning limit: drop connections that are over the limit or send TCP RST for connections over the limit. The default is drop.

```
#(config client IP_address) connection-limit number_of_tcp_connections Indicates the number of simultaneous connections between 1 and 65535. The default is 100.
```

```
#(config client IP_address) exit
```

Exits the **#(config client** *ip_address*) submode and returns to **#(config client)** mode.

#(config client *IP_address*) **failure-limit** *number_of_requests*Indicates the maximum number of failed requests a client is allowed before the proxy starts issuing warnings. Default is 50. This limit can be modified on a per-client basis.

```
#(config client IP_address) no {connection-limit | failure-limit |
    warning-limit | unblock-time}
```

Clears the specified limits on a per-client basis.

If you edit an existing client's limits to a smaller value, the new value only applies to new connections to that client. For example, if the old value was 10 simultaneous connections and the new value is 5, existing connections above 5 are not dropped.

#(config client IP_address) unblock-time minutes

Indicates the amount of time a client is blocked at the network level when the client-warning-limit is exceeded. Time must be a multiple of 10 minutes, up to a maximum of 1440. The default is unlimited.

```
#(config client IP_address) view
Displays the limits for this client.
```

```
#(config client IP_address) warning-limit number_of_warnings}
Indicates the number of warnings sent to the client before the client is blocked at the network level
```

and the administrator is notified. The default is 10; the maximum is 100.

```
#(config client IP_address) enable-limits
Enables attack detection. This is a global setting and cannot be configured individually for specific
```

#(config client *IP_address*) **interval** *minutes*Indicates the amount of time, in multiples of 10 minutes, that client activity is monitored. The default is 20. Note that this is a global limit and cannot be modified for individual clients.

Clears the specified limit settings. These settings are applied to all new clients.

#(config client IP_address) view [blocked | connections | statistics]
Views all limits for all clients, or you can show clients blocked at the network level, view the client connection table, or view client request failure statistics.

```
#(config client IP_address) unblock ip_address
Releases a specific IP address.
```

For More Information

clients.

□ Volume 6: Advanced Networking

```
SGOS#(config) attack-detection
SGOS#(config attack-detection) client
SGOS#(config client) view
Client limits enabled:
                                  true
Client interval:
                                  20 minutes
Default client limits:
                                  700
Client connection limit:
Client failure limit:
                                  50
Client warning limit:
                                  10
Blocked client action:
                                  Drop
Client connection unblock time:
                                  unlimited
```

Client limits for 10.9.17.159: Client connection limit: unlimited Client failure limit: unlimited Client warning limit: unlimited Blocked client action: Drop Client connection unblock time: unlimited Client limits for 10.9.17.134: Client connection limit: 700 Client failure limit: 50 Client warning limit: 10 Blocked client action: Drop Client connection unblock time: unlimited #(config) attack-detection #(config server)

#(config server)

Synopsis

Configures a server for attack detection.

Syntax

```
#(config attack-detection) server
This changes the prompt to:
    #(config server)
```

Subcommands

```
#(config server) create hostname
   Creates a server or server group that is identified by the hostname.
#(config server) delete hostname
   Deletes a server or server group.
#(config server) edit hostname
   Changes the prompt to # (config server hostname)
   #(config server hostname) add hostname
       Adds an additional server to this server group.
   #(config server hostname) exit
       Exits the #(config server hostname) submode and returns to #(config server) mode.
   #(config server hostname) remove hostname
       Removes a server from this group. You cannot remove the original server from the group.
   #(config server hostname) request-limit number of requests
       Indicates the number of simultaneous requests allowed from this server or server group. The default
       is 1000.
   #(config server hostname) view
       Displays the request limit for this server or server group.
#(config server) exit
   Exits the #(config server) submode and returns to #(config attack-detection) mode.
#(config server) view [statistics]
   Displays the request limit for all servers or server groups.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) attack-detection
SGOS#(config attack-detection) server
SGOS#(config server) create test1
ok
SGOS#(config server) edit test1
SGOS#(config server test1) add 10.9.17.134
ok
SGOS#(config server test1) view
Server configuration for test1:
Request limit: 1000
Host: 10.9.17.134
```

#(config) bandwidth-gain

Synopsis

Bandwidth gain is a measure of the effective increase of server bandwidth resulting from the client's use of a content accelerator. For example, a bandwidth gain of 100% means that traffic volume from the SG appliance to its clients is twice as great as the traffic volume being delivered to the SG appliance from the origin server(s). Using bandwidth gain mode can provide substantial gains in apparent performance.

Keep in mind that bandwidth gain is a relative measure of the SG appliance's ability to amplify traffic volume between an origin server and the clients served by the device.

Syntax

```
#(config) bandwidth-gain disable
Disables bandwidth-gain mode

#(config) bandwidth-gain enable
Enables bandwidth-gain mode.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) bandwidth-gain enable ok
```

#(config) bandwidth-management

Synopsis

Bandwidth management allows you to classify, control, and, if required, limit the amount of bandwidth used by a class of network traffic flowing into or out of the SG appliance.

Syntax

```
#(config) bandwidth-management
This changes the prompt to:
    #(config bandwidth-management)
```

Subcommands

```
#(config bandwidth-management) create class_name
   Creates a bandwidth-management class.
#(config bandwidth-management) delete class name
   Deletes the specified bandwidth-management class. Note that if another class has a reference to the
   specified class, this command fails.
#(config bandwidth-management) disable
   Disables bandwidth-management.
#(config bandwidth-management) edit class name—changes the prompt (see #(config
   bandwidth-management class name) on page 118)
#(config bandwidth-management) enable
   Enables bandwidth-management.
#(config bandwidth-management) exit
   Exits #(config bandwidth-management) mode and returns to #(config) mode.
#(config bandwidth-management) view configuration [bandwidth_class]
   Displays bandwidth-management configuration for all bandwidth-management classes or for the class
   specified.
#(config bandwidth-management) view statistics [bandwidth class]
   Displays bandwidth-management statistics for all bandwidth-management classes or for the class
   specified.
```

For More Information

Volume 6: Advanced Networking

```
SGOS#(config) bandwidth-management
SGOS#(config bandwidth-management) enable
ok
SGOS#(config bandwidth-management) create Office_A
ok
SGOS#(config bandwidth-management) edit Office_A
SGOS#(config bw-class Office_A) exit
SGOS#(config bandwidth-management) exit
SGOS#(config)
```

#(config bandwidth-management class_name)

Synopsis

This command allows you to edit a bandwidth-management class.

Syntax

```
#(config) bandwidth-management
This changes the prompt to:
    #(config bandwidth-management)
    #(config bandwidth-management) edit class_name
This changes the prompt to:
    #(config bandwidth-management class name)
```

Subcommands

```
#(config bandwidth-management class_name) exit
   Exits #(config bandwidth-management class_name) mode and returns to #(config
   bandwidth-management) mode.
#(config bandwidth-management class name) max-bandwidth maximum in kbps
   Sets the maximum bandwidth for this class.
#(config bandwidth-management class_name) min-bandwidth minimum_in_kbps
   Sets the minimum bandwidth for this class
\#(config\ bandwidth-management\ class\_name) no max-bandwidth
   Resets the maximum bandwidth of this bandwidth-management class to the default (unlimited—no
   maximum)
#(config bandwidth-management class name) no min-bandwidth
   Resets the minimum bandwidth of this bandwidth-management class to the default (no minimum).
#(config bandwidth-management class name) no parent
   Clears the parent from this bandwidth-management class.
#(config bandwidth-management class_name) parent class_name
   Makes the specified class a parent of the class being configured.
#(config bandwidth-management class name) priority value from 0 to 7
   Sets the priority for this bandwidth-management class. The lowest priority level is 0 and the highest is 7.
#(config bandwidth-management class name) view [children]
    Displays the settings for this bandwidth-management class or displays the settings for the children of
    this bandwidth-management class.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) bandwidth-management
SGOS#(config bandwidth-management) edit CEO_A
SGOS#(config bw-class CEO_A) parent Office_A
ok
SGOS#(config bw-class CEO_A) priority 2
ok
SGOS#(config bw-class CEO_A) exit
SGOS#(config bandwidth-management) exit
SGOS#(config)
```

#(config) banner #(config) banner

#(config) banner

Synopsis

This command enables you to define a login banner for your users.

Syntax

```
#(config) banner login string
   Sets the login banner to the value of string.
#(config) banner no login
   Sets the login banner to null.
```

For More Information

Volume 3: Proxies and Proxy Services

```
#(config) banner login "Sales and Marketing Intranet Web"
    ok
```

#(config) bridge #(config) bridge

#(config) bridge

Synopsis

Allows you to configure bridging.

Syntax

```
#(config) bridge
This changes the prompt to:
#(config bridge)
```

Subcommands

```
#(config bridge) bandwidth-class bridgename
Sets bridge bandwidth class.

#(config bridge) create bridgename
Creates a bridge.

#(config bridge) delete bridgename
Deletes the bridge.

#(config bridge) edit bridgename
Changes the prompt to #(config bridge bridgename)

#(config bridge bridgename) exit
Exits the #(config bridge hostname) submode and returns to #(config bridge) mode.

#(config bridge) no bandwidth-class
Clears the bandwidth-class settings.

#(config bridge) view {configuration | statistics | fwtable} bridgename
Displays information for the specified bridge or fall all bridges.
```

Note: To bandwidth-manage a bridge, bandwidth management must be enabled. Bandwidth management is enabled by default if you have a valid bandwidth-management license. You must also create a bandwidth class for bridging (in bandwidth-management mode) before you can select it here. See #(config bandwidth-management class_name) on page 118 for more information.

For More Information

□ Volume 2: Getting Started

```
SGOS#(config) bridge
SGOS#(config bridge) create test
ok
SGOS#(config bridge) exit
SGOS#(config)
```

#(config bridge bridge_name)

Synopsis

This command allows you to edit a bridge.

Syntax

```
#(config) bridge
This changes the prompt to:
    #(config bridge)
    #(config bridge) edit bridge_name
This changes the prompt to:
    #(config bridge bridge_name)
```

Subcommands

```
#(config bridge bridgename) attach-interface adapter#:interface#
   Attaches the interface to the bridge.
#(config bridge bridgename) clear-fwtable {static}
   Clears bridge forwarding table.
#(config bridge bridgename) clear-statistics
   Clears the bridge statistics.
#(config bridge bridgename) exit
   Exits #(config bridge pridge name) mode and returns to #(config bridge) mode.
#(config bridge bridgename) failover {group | mode} {parallel | serial}
   Associates the bridge to a failover group or sets the bridge failover mode.
#(config bridge bridgename) no {interface | failover | static-fwtable-entry}
   Clears the settings as follows:
    interface: Removes the interface from the bridge.
    failover: Negates failover settings.
    static-fwtable-entry: Clears the static forwarding table entry.
#(config bridge bridgename) spanning-tree adapter#:interface# {enable | disable}
   Enables or disables spanning tree participation.
#(config bridge bridgename) static-fwtable-entry adapter#:interface# mac-address
   Adds a static forwarding table entry.
#(config bridge bridgename) view {configuration | statistics | fwtable}
   Displays information for the specified bridge.
```

For More Information

□ Volume 2: Getting Started

```
SGOS#(config) bridge
SGOS#(config bridge) edit b_1
SGOS#(config bridge b_1) attach interface 0:1
ok
SGOS#(config bridge b_1) failover mode parallel
ok
SGOS#(config bridge b_1) exit
SGOS#(config bridge) exit
SGOS#(config)
```

#(config) caching #(config) caching

#(config) caching

Synopsis

Objects can be stored and managed for later retrieval.

Discussion

When a stored HTTP object expires, it is placed in a refresh list. The SG appliance processes the refresh list in the background, when it is not serving requests. Refresh policies define how the device handles the refresh process.

The HTTP caching options allow you to specify:

- Maximum object size
- Negative responses
- Refresh parameters

In addition to HTTP objects, the SG appliance can store objects requested using FTP. When the device retrieves and stores an FTP object, it uses two methods to determine how long the object should stay cached.

- ☐ If the object has a last-modified date, the SG appliance assigns a refresh date to the object that is a percentage of the last-modified date.
- ☐ If the object does not have a last-modified date, the SG appliance assigns a refresh date to the object based on a fixed period of time.

Syntax

```
#(config) caching
This changes the prompt to:
#(config caching)
```

Subcommands

```
#(config caching) always-verify-source
   Specifies the SG appliance to always verify the freshness of an object with the object source.
#(config caching) exit
    Exits the #(config caching) mode and returns to #(config) mode.
#(config caching) ftp—changes the prompt to #(config caching ftp) on page 126
#(config caching) max-cache-size megabytes
   Specifies the maximum size of the cache to the value indicated by megabytes.
#(config caching) negative-response minutes
   Specifies that negative responses should be cached for the time period identified by minutes
#(config caching) no always-verify-source
   Specifies that the SG appliance should never verify the freshness of an object with the object source
#(config caching) refresh automatic
   Specifies that the SG appliance should manage the refresh bandwidth.
#(config caching) refresh bandwidth kbps
   Specifies the amount of bandwidth in kilobits to utilize for maintaining object freshness.
#(config caching) refresh no automatic
   Specifies that the SG appliance should not manage the refresh bandwidth.
```

#(config) caching

```
#(config caching) view
Displays caching parameters.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config) caching
SGOS#(config caching) always-verify-source ok
SGOS#(config caching) max-cache-size 100 ok
SGOS#(config caching) negative-response 15 ok
SGOS#(config caching) refresh automatic ok
SGOS#(config caching) exit
SGOS#(config)
```

#(config) caching #(config caching ftp)

#(config caching ftp)

Synopsis

The FTP caching options allow you to specify:

- Transparency
- Maximum object size
- Caching objects by date
- □ Caching objects without a last-modified date: if an FTP object is served without a last modified date, the SG appliance caches the object for a set period of time.

Syntax

```
#(config) caching
This changes the prompt to:
    #(config caching)
    #(config caching) ftp
This changes the prompt to:
    #(config caching ftp)
```

Subcommands

```
#(config caching ftp) disable | enable}
  Disables or enables caching FTP objects

#(config caching ftp) exit
  Exits #(config caching ftp) mode and returns to #(config caching) mode.

#(config caching ftp) type-m-percent percent
  Specifies the TTL for objects with a last-modified time.

#(config caching ftp) type-n-initial hours
  Specifies the TTL for objects with no expiration.

#(config caching ftp) view
  Shows the current FTP caching settings.
```

For More Information

□ Volume 3: Proxies and Proxy Services

#(config) caching #(config caching ftp)

```
SGOS#(config caching) ftp SGOS#(config caching ftp) enable ok SGOS#(config caching ftp) max-cache-size 200 ok SGOS#(config caching ftp) type-m-percent 20 ok SGOS#(config caching ftp) type-n-initial 10 ok SGOS#(config caching ftp) exit SGOS#(config caching) exit SGOS#(config)
```

#(config) clock #(config) clock

#(config) clock

Synopsis

To manage objects in the cache, a SG appliance must know the current Universal Time Coordinates (UTC) time. By default, the device attempts to connect to a Network Time Protocol (NTP) server to acquire the UTC time. The SG appliance includes a list of NTP servers available on the Internet, and attempts to connect to them in the order they appear in the NTP server list on the NTP tab. If the SG appliance cannot access any of the listed NTP servers, you must manually set the UTC time using the clock command.

Syntax

```
#(config) clock [subcommands]
```

Subcommands

```
#(config) clock day day
```

Sets the Universal Time Code (UTC) day to the day indicated by *day*. The value can be any integer from 1 through 31.

```
#(config) clock hour hour
```

Sets the UTC hour to the hour indicated by hour. The value can be any integer from 0 through 23.

```
#(config) clock minute minute
```

Sets the UTC minute to the minute indicated by *minute*. The value can be any integer from 0 through 59.

```
#(config) clock month month
```

Sets the UTC month to the month indicated by month. The value can be any integer from 1 through 12.

```
#(config) clock second second
```

Sets the UTC second to the second indicated by second. The value can be any integer from 0 through 59.

```
#(config) clock year year
```

Sets the UTC year to the year indicated by *year*. The value must take the form *xxxx*.

For More Information

□ Volume 2: Getting Started

```
SGOS#(config) clock year 2003
ok
SGOS#(config) clock month 4
ok
SGOS#(config) clock day 1
ok
SGOS#(config) clock hour 0
ok
SGOS#(config) clock minute 30
ok
SGOS#(config) clock second 59
ok
```

#(config) console-services

Synopsis

The SG appliance provides console services to communicate:

- HTTP (Not enabled by default)
- **HTTPS**
- SSH
- Telnet (Not created by default; a Telnet proxy service is created by default on port 23.)

Syntax

```
#(config) console-services
This changes the prompt to:
   #(config console-services)
```

Subcommands

The options below allow you to manage the console service.

```
#(config console-services) create {http-console | https-console | ssh-console |
   Creates a console service with the service name you choose.
#(config console-services) delete console_name
   Deletes the specified service name.
#(config console-services) edit console name
   Changes the prompt, depending on the console service you choose:
#(config http-console) on page 130
```

- #(config https-console) on page 131
- #(config ssh-console) on page 133
- #(config telnet-console) on page 134

```
#(config console-services) exit
```

Leaves console-services submode; returns to the config prompt.

```
#(config console-services) view
```

Views all console services.

If you create a console name with spaces, the name must be enclosed in quotes; for example, "My Console1".

#(config http-console)

Synopsis

This console service intercepts HTTP traffic, usually on port 80. This console service is created but not enabled due to security concerns.

Syntax

```
#(config console-services) edit http_console
This changes the prompt to:
    #(config http_console)
```

Subcommands

```
#(config http_console) add {all | proxy_ip_address} port {enable | disable}
   Add a listener to the console service. All selects all IP addresses on the proxy; alternatively, you can select
   a specific proxy's IP address. You must always choose a port. By default the listener is enabled.

#(config http_console) disable {all | proxy_ip_address} port
   Disables the specified listener.

#(config http_console) enable {all | proxy_ip_address} port
   Enables the specified listener.

#(config http_console) exit
   Exits to the (config console-services) prompt.

#(config http_console) remove {all | proxy_ip_address} port
   Removes the specified listener.

#(config http_console) view
   Views a summary of the console service's configuration.
```

For More Information

- " console-services" on page 129
- □ Volume 3: Proxies and Proxy Services

```
SGOS#(config) console-services
SGOS#(config console-services) create http-console http_console
SGOS#(config console-services) edit http_console
SGOS#(config http_console) add 10.25.36.47 80
SGOS#(config http_console) enable 10.25.36.47 80
```

#(config https-console)

Synopsis

The HTTPS console intercepts traffic on ports 8082. You can create additional HTTPS consoles if necessary.

Syntax

```
#(config console-services) edit https_console
This changes the prompt to:
   #(config https_console)
```

Subcommands

```
#(config https console) add {all | proxy ip address} port {enable | disable}
    Add a listener to the console service. All selects all IP addresses on the proxy; alternatively, you can select
   a specific proxy's IP address. You must always choose a port. By default the listener is enabled.
#(config https_console) attribute cipher-suite cipher-suites
    Associates one more cipher suites with the console service. Cipher suites can be any combination of the
   following:
   rc4-md5
   rc4-sha
   des-cbc3-sha
   des-cbc3-md5
   rc2-cbc-md5
   rc4-64-md5
   des-cbc-sha
   des-cbc-md5
   exp1024-rc4-md5
   exp1024-rc4-sha
   exp1024-rc2-cbc-md5
   exp1024-des-cbc-sha
   exp-rc4-md5
   exp-rc2-cbc-md5
   exp-des-cbc-sha
   aes128-sha
   aes256-sha
#(config https_console) attribute keyring keyring ID
   Specifies the keyring ID you want to use with this console.
#(config https console) attribute ssl-versions {sslv2 | sslv3 | tlsv1 | sslv2v3
    |sslv2tlsv1 | sslv3tlsv1 | sslv2v3tlsv1}
   Selects the SSL versions to use.
#(config https console) disable {all | proxy ip address} port
   Disables the specified listener.
#(config https_console) enable {all | proxy_ip_address} port
   Enables the specified listener.
#(config https console) exit
   Exits to the (config console-services) prompt.
#(config https console) remove {all | proxy_ip_address} port
    Removes the specified listener.
```

```
#(config https_console) view
Views a summary of the console service's configuration.
```

For More Information

- □ "console-services" on page 129
- □ Volume 3: Proxies and Proxy Services

Example

```
SGOS#(config) console-services
SGOS#(config console-services) create https-console https_console
SGOS#(config console-services) edit https_console
SGOS#(config https_console) add 10.25.36.47 80
SGOS#(config https_console) enable 10.25.36.47 80
SGOS#(config https_console) attribute cipher-suite rc4-md5 des-cbc-sha
aes128-sha
```

Note: For a discussion of available cipher suites, refer to *Volume 3: Proxies and Proxy Services*.

#(config ssh-console)

Synopsis

The SSH console service allows to you to securely connect to the Command Line Interface. By default, SSHv2 is enabled and assigned to port 22. You do not need to create a new host key unless you want to change the existing configuration.

Syntax

```
#(config console-services) edit ssh_console
This changes the prompt to:
    #(config ssh_console)
```

Subcommands

```
#(config ssh_console) add {all | proxy_ip_address} port {enable | disable}
   Add a listener to the console service. All selects all IP addresses on the proxy; alternatively, you can select
   a specific proxy's IP address. You must always choose a port. By default the listener is enabled.

#(config ssh_console) disable {all | proxy_ip_address} port
   Disables the specified listener.

#(config ssh_console) enable {all | proxy_ip_address} port
   Enables the specified listener

#(config ssh_console) exit
   Exits to the (config console-services) prompt.

#(config ssh_console) remove {all | proxy_ip_address} port
   Removes the specified console service.

#(config ssh_console) view
   Views a summary of the console service's configuration.
```

For More Information

```
☐ "console-services" on page 129
☐ "ssh-console" on page 309
```

```
SGOS#(config) console-services
SGOS#(config console-services) create ssh-console ssh_console
SGOS#(config console-services) edit ssh_console
SGOS#(config ssh_console) add 10.25.36.47 80
SGOS#(config ssh_console) enable 10.25.36.47 80
```

#(config telnet-console)

Synopsis

This console service provides access to the administrative CLI through Telnet. Due to security concerns, use of this console is not recommended.

A shell Telnet proxy service is created on port 23. If you do decide to create a Telnet console, you must first remove the Telnet proxy service and apply the changes. You can later re-add the Telnet proxy service on a different port.

Syntax

```
#(config console-services) edit telnet_console
This changes the prompt to:
    #(config telnet_console)
```

Subcommands

```
#(config telnet_console) add {all | proxy_ip_address} port {enable | disable}
   Add a listener to the console service. All selects all IP addresses on the proxy; alternatively, you can select
   a specific proxy's IP address. You must always choose a port. By default the listener is enabled.

#(config telnet_console) disable {all | proxy_ip_address} port
   Disables the specified listener.

#(config telnet_console) enable {all | proxy_ip_address} port
   Enables the specified listener.

#(config telnet_console) exit
   Exits to the (config console-services) prompt.

#(config telnet_console) remove {all | proxy_ip_address} port
   Removes the specified listener.

#(config telnet_console) view
   Views a summary of the console service's configuration.
```

For More Information

- " console-services" on page 129
- □ Volume 3: Proxies and Proxy Services

```
SGOS#(config) console-services
SGOS#(config console-services) create telnet-console telnet_console
SGOS#(config console-services) edit telnet_console
SGOS#(config telnet_console) add 10.25.36.47 80
SGOS#(config telnet_console) enable 10.25.36.47 80
```

#(config) content #(config) content

#(config) content

Synopsis

Use this command to manage and manipulate content distribution requests and re-validate requests.

Note: The content command options are not compatible with transparent FTP.

Syntax

```
#(config) content [subcommands]
```

Subcommands

```
#(config) content cancel outstanding-requests
   Specifies to cancel all outstanding content distribution requests and re-validate requests.
#(config) content cancel url url
   Specifies to cancel outstanding content distribution requests and re-validate requests for the URL
   identified by ur1.
#(config) content delete regex regex
   Specifies to delete content based on the regular expression identified by regex.
#(config) content delete url url}
   Specifies to delete content for the URL identified by url.
#(config) content distribute url [from url]
   Specifies that the content associated with ur1 should be distributed from the origin server.
#(config) content priority {regex priority_0-7 regex
   Specifies to add a content deletion policy based on the regular expression identified by regex.
#(config) content priority url priority_0-7 url
   Specifies to add a content deletion policy for the URL identified by url.
#(config) content revalidate regex regex
    Revalidates the content associated with the regular expression identified by regex with the origin
    server.
#(config) content revalidate url url [from url]
    Revalidates the content associated with the url.
```

For More Information

Blue Coat Director Configuration and Management Guide

```
SGOS#(config) content distribute http://www.bluecoat.com
Current time: Mon, 01 Apr 2003 00:34:07 GMT
SGOS#(config) content revalidate url http://www.bluecoat.com
Last load time: Mon, 01 Apr 2003 00:34:07 GMT
SGOS#(config) content distribute http://www.bluecoat.com
Current time: Mon, 01 Apr 2003 00:35:01 GMT
SGOS#(config) content priority url 7 http://www.bluecoat.com
SGOS#(config) content cancel outstanding-requests
SGOS#(config) content delete url http://www.bluecoat.com
```

#(config) content-filter

Synopsis

The SG appliance offers the option of using content filtering to control the type of retrieved content and to filter requests made by clients. The SG appliance supports these content filtering methods:

Local database

This method allows you to produce and maintain your own content-filtering list locally, through the SG appliance CLI or Management Console.

Blue Coat Web Filter (BCWF)

BCWF is a highly effective content filtering service that can quickly learn and adapt to the working set of its users. Also, BCWF can use dynamic categorization to analyze requested Web pages in real time, blocking new unrated content on the fly, while providing the database with instant updates that impact all users without service interruption.

Internet Watch Foundation[®] (IWF)

The IWF is a non-profit organization that provides to enterprises a list of known child pornography URLs. The IWF database features a single category called IWF-Restricted, which is detectable and blockable using policy. IWF can be enabled along with other content filtering services.

Vendor-based content filtering

This method allows you to block URLs using vendor-defined categories. For this method, use content filtering solutions from the following vendors:

- i-FILTER
- InterSafeTM
- Optenet
- ProventiaTM
- SmartFilterTM
- SurfControlTM
- Websense[®] (both locally on the SG appliance and remotely on a separate Websense Enterprise Server)
- WebWasher[®]

You can also combine this type of content filtering with the SG appliance policies, which use the Blue Coat Policy Language.

Denying access to URLs through policy

This method allows you to block by URL, including filtering by scheme, domain, or individual host or IP address. For this method, you define SG appliance policies, which use the Blue Coat Policy Language.

Syntax

```
#(config) content-filter
This changes the prompt to:
#(config content-filter)
```

Subcommands

```
#(config content-filter) bluecoat
   Enters configuration mode for Blue Coat Web Filter. See # (config bluecoat) on page 139.
#(config content-filter) categories
   Shows available categories.
#(config content-filter) exit
    Exits configure content filter mode and returns to configure mode.
#(config content-filter) i-filter
   Enters configuration mode for i-FILTER. See # (config i-filter) on page 141.
#(config content-filter) intersafe
   Enters configuration mode for InterSafe. See # (config intersafe) on page 143.
#(config content-filter) iwf
   Enters configuration mode for IWF. See # (config iwf) on page 145.
#(config content-filter) local—changes the prompt (see #(config local) on page 147)
   Enters configuration mode for Local database.
#(config content-filter) no review-message
   Specifies that vendor categorization review be turned off.
#(config content-filter) optenet
   Enters configuration mode for Optenet. See # (config optenet) on page 149.
#(config content-filter) proventia
   Enters configuration mode for Proventia. See # (config proventia) on page 151.
#(config content-filter) provider bluecoat {disable | enable | lookup-mode
    {always | uncategorized}}
    Enables or disables Blue Coat Web Filter database. The lookup-mode option specifies whether every
   URL should be categorized by the downloaded filter.
#(config content-filter) provider local {disable | enable | lookup-mode {always |
   uncategorized \ \ \
   Enables or disables a local user database. The lookup-mode option specifies whether every URL should
   be categorized by the downloaded filter.
#(config content-filter) provider iwf {disable | enable | lookup-mode {always |
   uncategorized}}
   Enables or disables IWF filtering. The lookup-mode option specifies whether every URL should be
   categorized by the downloaded filter.
#(config content-filter) provider 3rd-party i-filter
   Selects i-FILTER content filtering.
#(config content-filter) provider 3rd-party intersafe
   Selects InterSafe content filtering.
#(config content-filter) provider 3rd-party none
   Specifies that a third-party vendor not be used for content filtering.
#(config content-filter) provider 3rd-party optenet
   Selects Optenet content filtering.
```

```
#(config content-filter) provider 3rd-party proventia
   Selects Proventia Web Filter content filtering.
#(config content-filter) provider 3rd-party smartfilter
   Selects SmartFilter content filtering.
#(config content-filter) provider 3rd-party surfcontrol
   Selects SurfControl content filtering.
#(config content-filter) provider 3rd-party websense
   Selects Websense content filtering.
#(config content-filter) provider 3rd-party webwasher
   Selects Webwasher URL Filter content filtering.
#(config content-filter) provider {local | bluecoat | iwf | 3rd-party}
   lookup-mode {always | uncategorized}
   Selects Lookup Mode. Default is Always.
#(config content-filter) review-message
   Used for categorization review for certain Content Filtering vendors. The review-message setting enables
   two substitutions that can be used in exceptions pages to allow users to review or dispute content
   categorization results.
#(config content-filter) smartfilter
   Enters configuration mode for SmartFilter. See # (config smartfilter) on page 153.
#(config content-filter) surfcontrol
   Enters configuration mode for SurfControl. See # (config surfcontrol) on page 155.
#(config content-filter) test-url url
   Displays categories for a URL assigned by the current configuration.
#(config content-filter) websense
   Enters configuration mode for Websense. See # (config websense) on page 157.
#(config content-filter) webwasher
   Enters configuration mode for WebWasher. See #(config webwasher) on page 159
#(config content-filter) view
   Shows the current settings for the local database (if it is in use) and the selected provider (if one is
   selected).
```

For More Information

- □ Volume 8: Managing Content
- □ Volume 11: Content Policy Language Guide

```
SGOS#(config) content-filter
SGOS#(config content-filter) provider 3rd-party proventia
loading database....
ok
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config) content-filter #(config bluecoat)

#(config bluecoat)

Synopsis

Use this command to configure Blue Coat Web Filter content filtering.

Syntax

```
#(config) content-filter
This changes the prompt to:
    #(config content-filter) bluecoat
This changes the prompt to:
    #(config bluecoat)
```

Subcommands

```
#(config bluecoat) download auto
   Enables automatic database downloads.
#(config bluecoat) download day-of-week {all | friday | monday | none | saturday
    sunday | thursday | tuesday | wednesday |
   Specifies the day of the week for automatic downloads.
#(config bluecoat) download encrypted-password encrypted password
   Specifies the encrypted password for the database download server.
#(config bluecoat) download full-get-now
   Initiates an immediate full-size database download.
#(config bluecoat) download get-now
   Initiates an immediate database download.
#(config bluecoat) download password password
   Specifies the password for the database download server.
#(config bluecoat) download time-of-day 0-23
   Specifies the time of day for automatic downloads.
#(config bluecoat) download url {default | url}
   Specifies using either the default URL or a specific URL for the database download server.
#(config bluecoat) download username username
   Specifies the username for the database download server.
#(config bluecoat) exit
   Exits configure bluecoat mode and returns to configure content-filter mode.
#(config bluecoat) no download auto
   Disables automatic download.
#(config bluecoat) no download day-of-week {friday | monday | saturday | sunday |
    thursday | tuesday | wednesday}
   Clears day(s) of the week for automatic download.
#(config bluecoat) no download encrypted-password
   Clears the encrypted password for the database download server.
#(config bluecoat) no download password
   Clears the password for the database download server.
#(config bluecoat) no download url
   Clears the URL for the database download server.
```

#(config) content-filter #(config bluecoat)

```
#(config bluecoat) no download username
   Clears the username for the database download server.

#(config bluecoat) service {disable | enable}
   Enables or disables dynamic categorization.

#(config bluecoat) service mode {background | realtime | none}
   Configures dynamic categorization to run in the background, run in real time, or to not run.

#(config bluecoat) view
   Shows the current Blue Coat settings.
```

For More Information

Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) bluecoat
SGOS#(config bluecoat) service mode background ok
SGOS#(config bluecoat) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config) content-filter #(config i-filter)

#(config i-filter)

Synopsis

Use this command to configure i-FILTER content filtering

Syntax

```
#(config) content-filter
This changes the prompt to:
    #(config content-filter) i-filter
This changes the prompt to:
    #(config i-filter)
```

Subcommands

```
#(config i-filter) download auto
   Enables automatic database downloads.
#(config i-filter) download day-of-week {all | friday | monday | none | saturday
    sunday | thursday | tuesday | wednesday |
   Specifies the day of the week for automatic downloads.
#(config i-filter) download encrypted-password encrypted password
   Specifies the encrypted password for the database download server.
#(config i-filter) download full-get-now
   Initiates an immediate full-size database download.
#(config i-filter) download get-now
   Initiates an immediate database download.
#(config i-filter) download password password
   Specifies the password for the database download server.
#(config i-filter) download time-of-day 0-23
   Specifies the time of day for automatic downloads.
#(config i-filter) download url {default | url}
   Specifies using either the default URL or a specific URL for the database download server.
#(config i-filter) download username username
   Specifies the username for the database download server.
#(config i-filter) exit
   Exits configure i-filter mode and returns to configure content-filter mode.
#(config i-filter) no download auto
   Disables automatic download.
#(config i-filter) no download day-of-week {friday | monday | saturday | sunday |
    thursday | tuesday | wednesday}
   Clears day(s) of the week for automatic download.
#(config i-filter) no download encrypted-password
   Clears the encrypted password for the database download server.
#(config i-filter) no download password
   Clears the password for the database download server.
#(config i-filter) no download url
   Clears the URL for the database download server.
```

#(config) content-filter #(config i-filter)

```
#(config i-filter) no download username
   Clears the username for the database download server.
#(config i-filter) view
   Shows the current InterSafe settings.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) i-filter
SGOS#(config i-filter) no download day-of-week mon ok
SGOS#(config i-filter) no download day-of-week wed ok
SGOS#(config i-filter) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config) content-filter #(config intersafe)

#(config intersafe)

Synopsis

Use this command to configure InterSafe content filtering.

Syntax

```
#(config) content-filter
This changes the prompt to:
    #(config content-filter) intersafe
This changes the prompt to:
    #(config intersafe)
```

Subcommands

```
#(config intersafe) download auto
   Enables automatic database downloads.
#(config intersafe) download day-of-week {all | friday | monday | none | saturday
    sunday | thursday | tuesday | wednesday |
   Specifies the day of the week for automatic downloads.
#(config intersafe) download encrypted-password encrypted password
   Specifies the encrypted password for the database download server.
#(config intersafe) download full-get-now
   Initiates an immediate full-size database download.
#(config intersafe) download get-now
   Initiates an immediate database download.
#(config intersafe) download password password
   Specifies the password for the database download server.
#(config intersafe) download time-of-day 0-23
   Specifies the time of day for automatic downloads.
#(config intersafe) download url {default | url}
   Specifies using either the default URL or a specific URL for the database download server.
#(config intersafe) download username username
   Specifies the username for the database download server.
#(config intersafe) exit
   Exits configure Intersafe mode and returns to configure content-filter mode.
#(config intersafe) no download auto
   Disables automatic download.
#(config intersafe) no download day-of-week {friday | monday | saturday | sunday
    | thursday | tuesday | wednesday}
   Clears day(s) of the week for automatic download.
#(config intersafe) no download encrypted-password
   Clears the encrypted password for the database download server.
#(config intersafe) no download password
   Clears the password for the database download server.
#(config intersafe) no download url
   Clears the URL for the database download server.
```

#(config) content-filter #(config intersafe)

```
#(config intersafe) no download username
   Clears the username for the database download server.
#(config intersafe) view
   Shows the current InterSafe settings.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) intersafe
SGOS#(config intersafe) no download day-of-week mon ok
SGOS#(config intersafe) no download day-of-week wed ok
SGOS#(config intersafe) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config) content-filter #(config iwf)

#(config iwf)

Synopsis

Use this command to configure Internet Watch Foundation content filtering.

Syntax

```
#(config) content-filter
This changes the prompt to:
    #(config content-filter) iwf
This changes the prompt to:
    #(config iwf)
```

```
#(config iwf) download auto
   Enables automatic database downloads.
#(config iwf) download day-of-week {all | friday | monday | none | saturday |
   sunday | thursday | tuesday | wednesday}
   Specifies the day of the week for automatic downloads.
#(config iwf) download encrypted-password encrypted_password
   Specifies the encrypted password for the database download server.
#(config iwf) download full-get-now
   Initiates an immediate full-size database download.
#(config iwf) download get-now
   Initiates an immediate database download.
#(config iwf) download password password
   (Optional) Specifies the password for the database download server.
#(config iwf) download time-of-day 0-23
   Specifies the time of day for automatic downloads.
#(config iwf) download url {default | url}
   Specifies using either the default URL or a specific URL for the database download server.
#(config iwf) download username username
   Specifies the username for the database download server.
#(config iwf) exit
   Exits configure Intersafe mode and returns to #(configure content-filter) mode.
#(config iwf) no download auto
   Disables automatic download.
#(config iwf) no download day-of-week {friday | monday | saturday | sunday |
   thursday | tuesday | wednesday }
   Clears day(s) of the week for automatic download.
#(config iwf) no download encrypted-password
   Clears the encrypted password for the database download server.
#(config iwf) no download password
   Clears the password for the database download server.
#(config iwf) no download url
   Clears the URL for the database download server.
```

#(config) content-filter #(config iwf)

```
#(config iwf) no download username
        Clears the username for the database download server.
#(config iwf) view
Shows the current InterSafe settings.SGOS#(config) content-filter
```

```
SGOS#(config content-filter) local
SGOS#(config iwf) download day-of-week all
ok
SGOS#(config iwf) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config) content-filter #(config local)

#(config local)

Synopsis

Use this command to configure local content filtering.

Syntax

```
#(config) content-filter
This changes the prompt to:
    #(config content-filter) local
This changes the prompt to:
    #(config local)
```

```
#(config local) clear
   Clears the local database from the system.
#(config local) download auto
   Enables automatic database downloads.
#(config local) download day-of-week {all | friday | monday | none | saturday |
    sunday | thursday | tuesday | wednesday}
   Specifies the day of the week for automatic downloads.
#(config local) download encrypted-password encrypted_password
   Specifies the encrypted password for the database download server.
#(config local) download full-get-now
   Initiates an immediate full-size database download.
#(config local) download get-now
   Initiates an immediate database download.
#(config local) download password password
   Specifies the password for the database download server.
#(config local) download time-of-day 0-23
   Specifies the time of day for automatic downloads.
#(config local) download url {default | url}
   Specifies using either the default URL or a specific URL for the database download server.
#(config local) download username username
   Specifies the username for the database download server.
#(config local) exit
   Exits configure local database mode and returns to configure content-filter mode.
#(config local) no download auto
   Disables automatic download.
#(config local) no download day-of-week {friday | monday | saturday | sunday |
    thursday | tuesday | wednesday }
   Clears day(s) of the week for automatic download.
#(config local) no download encrypted-password
   Clears the encrypted password for the database download server.
#(config local) no download password
   Clears the password for the database download server.
```

#(config) content-filter #(config local)

```
#(config local) no download url
   Clears the URL for the database download server.

#(config local) no download username
   Clears the username for the database download server.

#(config local) source
   Shows the database source file.

#(config local) view
   Shows the current local database settings.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) local
SGOS#(config local) download day-of-week all
ok
SGOS#(config local) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config) content-filter #(config optenet)

#(config optenet)

Synopsis

Use this command to configure Optenet content filtering.

Syntax

```
#(config) content-filter
This changes the prompt to:
    #(config content-filter) optenet
This changes the prompt to:
    #(config optenet)
```

```
#(config optenet) download auto
   Enables automatic database downloads.
#(config optenet) download day-of-week {all | friday | monday | none | saturday |
    sunday | thursday | tuesday | wednesday}
   Specifies the day of the week for automatic downloads.
#(config optenet) download encrypted-password encrypted password
   Specifies the encrypted password for the database download server.
#(config optenet) download full-get-now
   Initiates an immediate full-size database download.
#(config optenet) download get-now
   Initiates an immediate database download.
#(config optenet) download password password
   Specifies the password for the database download server.
#(config optenet) download time-of-day 0-23
   Specifies the time of day for automatic downloads.
#(config optenet) download url {default | url}
   Specifies using either the default URL or a specific URL for the database download server.
#(config optenet) download username username
   Specifies the username for the database download server.
#(config optenet) exit
   Exits configure optenet mode and returns to configure content-filter mode.
#(config optenet) no download auto
   Disables automatic download.
#(config optenet) no download day-of-week {friday | monday | saturday | sunday |
    thursday | tuesday | wednesday}
   Clears day(s) of the week for automatic download.
#(config optenet) no download encrypted-password
   Clears the encrypted password for the database download server.
#(config optenet) no download password
   Clears the password for the database download server.
#(config optenet) no download url
   Clears the URL for the database download server.
```

#(config) content-filter #(config optenet)

```
#(config optenet) no download username
    Clears the username for the database download server.
#(config optenet) view
    Shows the current optenet Web Filter settings.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) optenet
SGOS#(config optenet) download time-of-day 20 ok
SGOS#(config optenet) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config) content-filter #(config proventia)

#(config proventia)

Synopsis

Use this command to configure Proventia Web Filter content filtering.

Syntax

```
#(config) content-filter
This changes the prompt to:
    #(config content-filter) proventia
This changes the prompt to:
    #(config proventia)
```

```
#(config proventia) download auto
   Enables automatic database downloads.
#(config proventia) download day-of-week {all | friday | monday | none | saturday
    sunday | thursday | tuesday | wednesday |
   Specifies the day of the week for automatic downloads.
#(config proventia) download encrypted-password encrypted password
   Specifies the encrypted password for the database download server.
#(config proventia) download full-get-now
   Initiates an immediate full-size database download.
#(config proventia) download get-now
   Initiates an immediate database download.
#(config proventia) download password password
   Specifies the password for the database download server.
#(config proventia) download time-of-day 0-23
   Specifies the time of day for automatic downloads.
#(config proventia) download url {default | url}
   Specifies using either the default URL or a specific URL for the database download server.
#(config proventia) download username username
   Specifies the username for the database download server.
#(config proventia) exit
   Exits configure proventia mode and returns to configure content-filter mode.
#(config proventia) no download auto
   Disables automatic download.
#(config proventia) no download day-of-week {friday | monday | saturday | sunday
    | thursday | tuesday | wednesday}
   Clears day(s) of the week for automatic download.
#(config proventia) no download encrypted-password
   Clears the encrypted password for the database download server.
#(config proventia) no download password
   Clears the password for the database download server.
#(config proventia) no download url
   Clears the URL for the database download server.
```

#(config) content-filter #(config proventia)

```
#(config proventia) no download username
    Clears the username for the database download server.
#(config proventia) view
    Shows the current proventia Web Filter settings.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) proventia
SGOS#(config proventia) download time-of-day 20 ok
SGOS#(config proventia) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config smartfilter) #(config) content-filter

#(config smartfilter)

Synopsis

Use this command to configure SmartFilter filters that control the type of content retrieved by the SG appliance and filter requests made by clients.

Syntax

```
#(config) content-filter
This changes the prompt to:
   #(config content-filter) smartfilter
This changes the prompt to:
   #(config smartfilter)
```

```
#(config smartfilter) allow-rdns
   Allow reverse DNS for lookups.
#(config smartfilter) download auto
   Enables automatic download.
#(config smartfilter) download day-of-week {all | friday | monday | none |
   saturday | sunday | thursday | tuesday | wednesday}
   Sets day(s) of the week for automatic download.
#(config smartfilter) download full-get-now
   Initiates an immediate full-size database download.
#(config smartfilter) download get-now
   Initiates immediate database download. If a full download is unnecessary, an incremental download is
   initiated.
#(config smartfilter) download license license key
   The customer serial number assigned you by SmartFilter.
#(config smartfilter) download server IP address or hostname
   Enter the IP address or hostname of the server you should use for downloads if requested.
#(config smartfilter) download time-of-day 0-23
   Sets time of day (UTC) for automatic download.
#(config smartfilter) exit
   Exits configure smartfilter mode and returns to configure content-filter mode.
#(config smartfilter) no allow-rdns
   Disallows reverse DNS for lookups.
#(config smartfilter) no download {auto | day-of-week {friday | monday | saturday
   sunday | thursday | tuesday | wednesday | encrypted-password | password |
   url | username}
   Negates download commands.
#(config smartfilter) no use-search-keywords
   Disables the ability to categorize search engines based on keywords in the URL query.
#(config smartfilter) use-search-keywords
   Allows you to categorize search engines based on keywords in the URL query.
```

#(config) content-filter #(config smartfilter)

#(config smartfilter) view
Shows the current SmartFilter settings.

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) smartfilter
SGOS#(config smartfilter) allow-rdns
ok
SGOS#(config smartfilter) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config surfcontrol) #(config) content-filter

#(config surfcontrol)

Synopsis

Use this command to configure SurfControl filters that control the type of content retrieved by the SG appliance and filter requests made by clients.

Syntax

```
#(config) content-filter
This changes the prompt to:
   #(config content-filter) surfcontrol
This changes the prompt to:
   #(config surfcontrol)
```

```
#(config surfcontrol) download auto
   Enables automatic download.
#(config surfcontrol) download day-of-week {all | friday | monday | none |
   saturday | sunday | thursday | tuesday | wednesday}
   Sets day(s) of the week for automatic download.
#(config surfcontrol) encrypted-password encrypted-password
   Sets the download encrypted password. The username/password is assigned by Blue Coat.
#(config surfcontrol) download full-get-now
   Initiates an immediate full-size database download.
#(config surfcontrol) download get-now
   Initiates immediate database download. If a full download is unnecessary, an incremental download is
   initiated.
#(config surfcontrol) download license license key
   The customer serial number assigned you by SurfControl.
#(config surfcontrol) download server IP address or hostname
   Enter the IP address or hostname of the server you should use for downloads if requested.
#(config surfcontrol) download time-of-day 0-23
   Sets time of day (UTC) for automatic download.
#(config surfcontrol) download url {default | url}
   Specifies using either the default URL or a specific URL for the database download server.
#(config surfcontrol) download username username
   Sets the download username. The username/password is assigned by Blue Coat.
#(config surfcontrol) exit
   Exits configure surfcontrol mode and returns to configure content-filter mode
#(config surfcontrol) download {auto | day-of-week {friday | monday | saturday |
   sunday | thursday | tuesday | wednesday} | encrypted-password | username |
   password | url}
   Negates download commands.
#(config surfcontrol) view
   Shows the current SurfControl settings.
```

#(config) content-filter #(config surfcontrol)

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) surfcontrol
SGOS#(config surfcontrol) no download url
ok
SGOS#(config surfcontrol) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config websense) #(config) content-filter

#(config websense)

Synopsis

Use this command to configure Websense filters that control the type of content retrieved by the SG appliance and filter requests made by clients.

Syntax

```
#(config) content-filter
This changes the prompt to:
   #(config content-filter) websense
This changes the prompt to:
   #(config websense)
```

Subcommands

```
#(config websense) always-apply-regexes
Forces an additional regular expression lookup for each URL to be categorized. Normally, regular expression
lookups are only performed when no category is found in the Websense database. This option causes them to
be performed always, even for categorized URLs. This can reduce lookup performance, but can allow certain
sites (such as translation, search engine, and link-cache sites) to be categorized more accurately.
#(config websense) download auto
    Enables automatic download.
#(config websense) download day-of-week {all | friday | monday | none | saturday
    | sunday | thursday | tuesday | wednesday }
   Sets day(s) of the week for automatic download.
#(config websense) download email-contact email address
   Specifies an e-mail address that is sent to Websense when downloading the database.
#(config websense) download full-get-now
   Initiates an immediate full-size database download.
#(config websense) download get-now
    Initiates immediate database download. If a full download is unnecessary, an incremental download is
#(config websense) download license license key
   Specifies the license key for the database download server.
#(config websense) download server {ip_address | hostname}
   Specifies the server location of the database.
#(config websense) download time-of-day 0-23
   Sets time of day (UTC) for automatic download.
#(config websense) exit
   Exits configure websense mode and returns to configure content-filter mode.
#(config websense) integration-service disable
    Disables the integration service.
#(config websense) integration-service enable
   Enables the integration service.
#(config websense) integration-service host (hostname or IP address)
   Set the integration service hostname or IP address. The IP address must match the IP address of the
```

Websense Log Server.

#(config) content-filter #(config websense)

```
#(config websense) integration-service port {integer between 0 and 65535}
   Configure the integration service port. Accepted values are between 0 and 65535.
#(config websense) log-forwarded-client-address
   Allows you to log the X-Forwarded-For header (if present and a parseable IP address) in the
   Websense Reporter log.
#(config websense) no always-apply-regexes
   Specifies to not apply regular expression filters to categorized URLs.
#(config websense) no download {auto | day-of-week {friday | monday | saturday
   sunday | thursday | tuesday | wednesday | email-contact | license | server |
   Clears the download parameters.
#(config websense) no integration-service {host | port}
   Clears the integration-service host or port.
#(config websense) no log-forwarded-client-address
   Disables logging the X-Forwarded-For header in the Websense Reporter log.
#(config websense) view
   Shows the current Websense settings.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) websense
SGOS#(config websense) no always-apply-regexes
ok
SGOS#(config websense) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config) content-filter #(config webwasher)

#(config webwasher)

Synopsis

Use this command to configure Webwasher URL Filter content filtering.

Syntax

```
#(config) content-filter
This changes the prompt to:
    #(config content-filter) webwasher
This changes the prompt to:
    #(config webwasher)
```

```
#(config webwasher) download auto
   Enables automatic database downloads.
#(config webwasher) download day-of-week {all | friday | monday | none | saturday
    sunday | thursday | tuesday | wednesday}
   Specifies the day of the week for automatic downloads.
#(config webwasher) download encrypted-password encrypted password
   Specifies the encrypted password for the database download server.
#(config webwasher) download full-get-now
    Initiates an immediate full-size database download.
#(config webwasher) download get-now
   Initiates an immediate database download. If a full download is unnecessary, an incremental download
   is initiated.
#(config webwasher) download password password
   Specifies the password for the database download server.
#(config webwasher) download time-of-day 0-23
   Specifies the time of day for automatic downloads.
#(config webwasher) download url {default | url}
   Specifies using either the default URL or a specific URL for the database download server.
#(config webwasher) download username username
   Specifies the username for the database download server.
#(config webwasher) exit
   Exits configure webwasher mode and returns to configure content-filter mode.
#(config webwasher) no download auto
   Disables automatic download.
#(config webwasher) no download day-of-week {friday | monday | saturday | sunday
    | thursday | tuesday | wednesday }
   Clears day(s) of the week for automatic download.
#(config webwasher) no download encrypted-password
   Clears the encrypted password for the database download server.
#(config webwasher) no download password
   Clears the password for the database download server.
```

#(config webwasher)

```
#(config webwasher) no download url
   Clears the URL for the database download server.
#(config webwasher) no download username
   Clears the username for the database download server.
#(config webwasher) view
   Shows the current webwasher Web Filter settings.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) content-filter
SGOS#(config content-filter) webwasher
SGOS#(config webwasher) download time-of-day 20 ok
SGOS#(config webwasher) exit
SGOS#(config content-filter) exit
SGOS#(config)
```

#(config) connection-forwarding

Synopsis

This command enables you to configure the TCP Connection Forwarding aspect of ADN transparent tunnel load balancing and asymmetric routing.

Syntax

```
#(config) connection-forwarding
This changes the prompt to:
    #(config connection-forwarding)
```

Subcommands

```
SGOS# (config connection forwarding) add ip_address
Add this SG appliance to a connection forwarding peer group.

SGOS# (config connection forwarding) port number
Specify the port used by all peers in the peer group to communicate connection information (each peer in the group must use the same port number). The default is 3030.

SGOS# (config connection forwarding) [enable | disable]
Enables or disables connection forwarding on this SG appliance.

SGOS# (config connection forwarding) remove ip_address
Remove this SG appliance from the connection forwarding peer group.

SGOS# (config connection forwarding) clear
Clear the list of forwarding peers from this SG appliance.

SGOS# (config connection forwarding) exit
Exits (config connection forwarding) mode and returns to # (config) mode.

SGOS# (config connection forwarding) view
View the TCP connection forwarding information.
```

For More Information

Volume 6: Advanced Networking

```
SGOS#(config) connection-forwarding
SGOS#(connection-forwarding) add 10.9.59.100
ok
SGOS#(config connection-forwarding) port 3030
ok
SGOS#(config connection-forwarding) enable
ok
```

#(config) diagnostics

Synopsis

This command enables you to configure the remote diagnostic feature Heartbeat.

Syntax

```
#(config) diagnostics
This changes the prompt to:
#(config diagnostics)
```

Subcommands

```
#(config diagnostics) cpu-monitor {disable | enable}
   Enables or disables the CPU monitor (the CPU monitor is disabled by default).
#(config diagnostics) cpu-monitor interval seconds
   Sets the periodic interval of the CPU monitor from 1 to 59 seconds (the default setting is 5 seconds).
#(config diagnostics) exit
   Exits #(config diagnostics) mode and returns to #(config) mode.
#(config diagnostics) heartbeat {disable | enable}
   Enables or disables the SG appliance Heartbeat features.
#(config diagnostics) monitor {disable | enable}
   Enables or disables the Blue Coat monitoring feature.
#(config diagnostics) send-heartbeat
   Triggers a heartbeat report.
#(config diagnostics) service-info
   Changes the prompt (see # (config service-info) on page 164)
#(config diagnostics) snapshot (create | delete) snapshot_name
   Creates or deletes a snapshot job.
#(config diagnostics) edit snapshot name
   Changes the prompt to # (config snapshot snapshot_name) on page 166)
#(config diagnostics) view configuration
   Displays diagnostics settings for Heartbeats, CPU monitor, automatic service-info, and snapshots.
#(config diagnostics) view cpu-monitor
   Displays the CPU Monitor results.
#(config diagnostics) view service-info
   Displays service-info settings and progress.
#(config diagnostics) view snapshot snapshot name
   Displays the snapshot settings (target, status, interval, to keep, to take, and next snapshot) for the
   snapshot name specified.
```

For More Information

□ Volume 10: Managing the Blue Coat SG Appliance

```
SGOS#(config) diagnostics
SGOS#(config diagnostics) heartbeat enable
  ok
SGOS#(config diagnostics) exit
SGOS#(config)
```

#(config) diagnostics #(config service-info)

#(config service-info)

Synopsis

This command allows you to send service information to Blue Coat.

Syntax

```
#(config) diagnostics
This changes the prompt to:
    #(config diagnostics) service-info
This changes the prompt to:
    #(config service-info)
```

Subcommands

```
#(diagnostics service-info) auto {disable | enable}
    Disables or enables the automatic service information feature.

#(diagnostics service-info) auto no sr-number
    Clears the service-request number for the automatic service information feature.

#(diagnostics service-info) auto sr-number sr_number
    Sets the service-request number for the automatic service information feature.
```

#(diagnostics service-info) **bandwidth-class** *bw_class_name*Sets a bandwidth class used to manage the bandwidth of service-information transfers.

In order to do bandwidth-manage service-information transfers, bandwidth management must be enabled. You must also create a bandwidth class for service-information transfers (in bandwidth-management mode) before you can select it here.

```
#(diagnostics service-info) cancel all
    Cancel all service information being sent to Blue Coat.
#(diagnostics service-info) cancel one_or_more_from_view_status
    Cancel certain service information being sent to Blue Coat.
#(diagnostics service-info) exit
    Exits #(config diagnostics service-info) mode and returns to #(config diagnostics)
    mode.
```

(diagnostics service-info) **no bandwidth-class**Disables bandwidth-management for service-information transfers

```
#(diagnostics service-info) send sr_number
    one or_more_commands_from_view_available
```

Sends a specific service request number along with a specific command or commands (chosen from the list provided by the view available command) to Blue Coat.

```
#(diagnostics service-info) view available
Shows list of service information than can be sent to Blue Coat.
#(diagnostics service-info) view status
```

Shows transfer status of service information to Blue Coat.

#(config) diagnostics #(config service-info)

For More Information

- □ #(config) bandwidth-management on page 117
- Volume 10: Managing the Blue Coat SG Appliance

```
SGOS#(config) diagnostics
SGOS#(config diagnostics) service-info
SGOS#(diagnostics service-info) view available
Service information that can be sent to Blue Coat
Name
                                        Approx Size (bytes)
Event log
                                        188,416
System_information
                                        Unknown
Snapshot_sysinfo
                                        Unknown
Snapshot_sysinfo_stats
                                        Unknown
SGOS#(diagnostics service-info) send 1-4974446 event_log system_information
snapshot sysinfo
Sending the following reports
Event_log
System_information
Snapshot_sysinfo
SGOS#(diagnostics service-info) view status
Name
                                          Transferred
Event log
                                          Transferred successfully
Snapshot_sysinfo
                                          Transferred successfully
Event_log
                                          Transferred successfully
System_information
                                           Transferred successfully
SGOS#(diagnostics service-info) exit
SGOS#(config diagnostics) exit
SGOS#(config)
```

#(config snapshot_name)

Synopsis

This command allows you to edit a snapshot job.

Syntax

```
#(config) diagnostics
This changes the prompt to:
    #(config diagnostics) snapshot edit snapshot_name
This changes the prompt to:
    #(config snapshot snapshot_name)
```

Subcommands

```
#(config snapshot snapshot name) clear-reports
   Clears all stored snapshots reports.
#(config snapshot snapshot_name) {disable | enable}
   Disables or enables this snapshot job.
#(config snapshot snapshot name) exit
   Exits #(config diagnostics snapshot_name) mode and returns to #(config diagnostics
   service-info) mode.
#(config snapshot snapshot name) interval minutes
   Specifies the interval between snapshots reports in minutes.
#(config snapshot snapshot name) keep number to keep (from 1 - 100)
   Specifies the number of snapshot reports to keep.
#(config snapshot snapshot_name) take {infinite | number_to_take}
   Specifies the number of snapshot reports to take.
#(config snapshot snapshot name) target object to fetch
   Specifies the object to snapshot.
#(config snapshot snapshot_name) view
   Displays snapshot status and configuration.
```

For More Information

□ Volume 10: Managing the Blue Coat SG Appliance

```
SGOS#(config) diagnostics
SGOS#(config diagnostics) snapshot testshot
SGOS#(diagnostics snapshot testshot) enable
ok
SGOS#(diagnostics service-info) interval 1440
ok
SGOS#(diagnostics snapshot testshot) exit
SGOS#(config diagnostics) exit
SGOS#(config)
```

#(config) dns #(config) dns

#(config) dns

Synopsis

The dns command enables you to modify the DNS settings for the SG appliance. Note that the alternate DNS servers are only checked if the servers in the standard DNS list return: "Name not found."

Syntax

```
#(config) dns [subcommands]
```

Subcommands

```
#(config) dns alternate ip_address
```

Adds the new alternate domain name server indicated by *ip address* to the alternate DNS server list.

```
#(config) dns clear alternate
```

Sets all entries in the alternate DNS server list to null.

```
#(config) dns clear imputing
```

Sets all entries in the name imputing list to null.

```
#(config) dns client-affinity {disable | enable}
```

Enable or disable client-affinity.

When enabled, requests from the same client resolve the hostname in the same order. www.google.com resolves to 66.102.7.99, 66.102.7.147, and 66.102.7.104. If client-affinity is enabled and the SG appliance receives a request (http, streaming or other proxy request) for www.google.com, it uses the client's IP address to determine the order of the resolved addresses. If client-affinity is disabled, the order of the resolved addresses changed each time the SG appliance receives a request.

```
#(config) dns clear server
```

Sets all entries in the primary DNS server list to null.

```
#(config) dns imputing name
```

Identifies the file indicated by name as the name imputing list.

```
#(config) dns negative-cache-ttl-override seconds
```

Set the DNS negative cache time-to-live value for seconds.

A DNS request to an unknown domain name (klauwjdasd.bluecaot.com) is cached by the SG appliance. This type of caching is called a negative cache because it does not resolve to an actual IP address. The TTL value for a negative cache entry can be overwritten by this command.

```
#(config) dns no alternate ip_address
```

Removes the alternate DNS server identified by ip_address from the alternate DNS server list.

```
#(config) dns no imputing imputed name
```

Removes the imputed name identified by imputed_name from the name imputing list.

```
#(config) dns no negative-cache-ttl-override
```

Do not override the negative cache time-to-live value.

```
#(config) dns no server ip_address
```

Removes the primary DNS server identified by *ip_address* from the primary DNS server list.

```
#(config) dns server ip_address
```

Adds the new primary domain name server indicated by *ip* address to the primary DNS server list.

For More Information

□ Volume 2: Getting Started

#(config) dns

```
SGOS#(config) dns clear server ok
SGOS#(config) dns server 10.253.220.249 ok
SGOS#(config) dns clear alternate ok
SGOS#(config) dns alternate 216.52.23.101 ok
```

#(config) event-log #(config) event-log

#(config) event-log

Synopsis

You can configure the SG appliance to log system events as they occur. Event logging allows you to specify the types of system events logged, the size of the event log, and to configure Syslog monitoring. The SG appliance can also notify you by e-mail if an event is logged.

Syntax

```
#(config) event-log
This changes the prompt to:
#(config event-log)
```

```
#(config event-log) exit
   Exits # (config event-log) mode and returns to # (config) mode.
#(config event-log) level configuration
   Writes severe and configuration change error messages to the event log.
#(config event-log) level informational
   Writes severe, configuration change, policy event, and information error messages to the event log.
#(config event-log) level policy
   Writes severe, configuration change, and policy event error messages to the event log.
#(config event-log) level severe
   Writes only severe error messages to the event log.
#(config event-log) level verbose
   Writes all error messages to the event log.
#(config event-log) log-size megabytes
   Specifies the maximum size of the event log in megabytes.
#(config event-log) mail add email_address
   Specifies an e-mail recipient for the event log output.
#(config event-log) mail clear
   Removes all e-mail recipients from the event log e-mail output distribution list.
#(config event-log) mail no smtp-gateway
   Clears the SMTP gateway used for notifications.
#(config event-log) mail remove email_address
   Removes the e-mail recipient indicated by email address from the event log e-mail output
   distribution list.
#(config event-log) mail smtp-gateway {domain_name | ip_address}
   Specifies the SMTP gateway to use for event log e-mail output notifications.
#(config event-log) syslog {disable | enable}
   Disables the collection of system log messages.
#(config event-log) syslog facility {auth | daemon | kernel | local0 | local1 |
   local2 | local3 | local4 | local5 | local6 | local7 | lpr | mail | news |
    syslog | user | uucp}
   Specifies the types of system log messages to be collected in the system log.
#(config event-log) syslog loghost {domain_name | ip_address}
   Specifies the host domain used for system log notifications.
```

#(config) event-log #(config) event-log

```
#(config event-log) syslog no loghost
#(config event-log) view [configuration] [start [YYYY-mm-dd] [HH:MM:SS]] [end
    [YYYY-mm-dd] [HH:MM:SS]] [regex regex | substring string]
    View the event-log configuration, using the #(config event-log) configuration command, or view the contents of the event-log, using the filters offered to narrow the view.
#(config event-log) when-full {overwrite | stop}
    Specifies what should happen to the event log when the maximum size has been reached. overwrite
```

overwrites the oldest information in a FIFO manner; stop disables event logging.

For More Information

□ Volume 10: Managing the Blue Coat SG Appliance

```
SGOS#(config) event-log
SGOS#(config event-log) syslog enable
  ok
```

#(config) exceptions #(config) exceptions

#(config) exceptions

Synopsis

These commands allow you to configure built-in and user-defined exception response objects.

Syntax

```
#(config) exceptions
This changes the prompt to:
#(config exceptions)
```

Subcommands

```
#(config exceptions) create exception_id
   Creates the given exception.
#(config exceptions) company-name name
   Sets the name used for the $(exception.company_name) substitution.
#(config exceptions) delete exception_id
   Deletes the exception specified by exception id.
#(config exceptions) edit exception id or user_defined exception id
   Changes the prompt to #(config exceptions [user-defined.]exception id) on
   page 172.
#(config exceptions) exit
   Exits # (config exceptions) mode and returns to # (config) mode.
#(config exceptions) inline {contact | details | format | help | http {contact |
   details | format | help | summary} | summary} eof_marker
   Configures defaults for all exception objects.
#(config exceptions) load exceptions
   Downloads new exceptions.
#(config exceptions) no path
   Clears the network path to download exceptions.
#(config exceptions) path url
   Specifies the network path to download exceptions.
#(config exceptions) user-defined inline {contact | details | format | help |
   http {contact | details | format | help | summary} | summary} eof_marker
   Configures the top-level values for user-defined exceptions.
```

For More Information

□ Volume 7: VPM and Advanced Policy

```
SGOS#(config) exceptions
SGOS#(config exceptions) default contact
  ok
SGOS#(config exceptions) exit
SGOS#(config)
```

#(config exceptions [user-defined.]exception_id)

Synopsis

These commands allow you to edit an exception or a user-defined exception.

Syntax

```
#(config) exceptions
This changes the prompt to:
    #(config exceptions) user_defined_exception_id
This changes the prompt to:
    #(config exceptions user_defined_exception_id)
```

Subcommands

```
#(config exceptions [user-defined.] exception_id) exit
    Exits #(config exceptions [user-defined] exception_id) mode and returns to #(config
    exceptions) mode.

#(config exceptions [user-defined.] exception_id) http-code
    numeric_http_response_code
    Configures this exception's HTTP response code.

#(config exceptions [user-defined.] exception_id) inline {contact | details |
    format | help | http {contact | details | format | help | summary} | summary}
    eof_marker
    Configures this exception's substitution values.
```

For More Information

□ Volume 7: VPM and Advanced Policy

```
SGOS#(config) exceptions
SGOS#(config exceptions) edit testname
SGOS#(config exceptions user-defined testname) http-code 000 ok
SGOS#(config exceptions user-defined testname) exit
SGOS#(config exceptions) exit
SGOS#(config)
```

#(config) exit #(config) exit

#(config) exit

Synopsis

Exits from Configuration mode to Privileged mode, from Privileged mode to Standard mode. From Standard mode, the exit command closes the CLI session.

Syntax

#(config) exit

The exit command has no parameters or subcommands.

#(config) external-services

Synopsis

These commands allow you to configure your external services.

Use the edit ICAP commands to configure the ICAP service used to integrate the SG appliance with a virus scanning server. The configuration is specific to the virus scanning server and includes the server IP address, as well as the supported number of connections. If you are using the SG appliance with multiple virus scanning servers or multiple scanning services on the same server, add an ICAP service for each server or scanning service.

Note: When you define virus scanning policies, use the same service name. Make sure you type the ICAP service name accurately, whether you are configuring the service on the SG appliance or defining policies, since the name retrieves the other configuration settings for that service.

Syntax

```
#(config) external-services
This changes the prompt to:
    #(config external-services)
```

```
#(config external-services) create icap icap_service_name
   Creates an ICAP service.
#(config external-services) create service-group service_group_name
   Creates a service group.
#(config external-services) create websense websense service name
   Creates a Websense service.
#(config external-services) delete name
   Deletes an external service.
#(config external-services) edit
   Changes the prompt to one of three external service edit commands:
   #(config icap icap service name) on page 176
   #(config service-group service group name) on page 178
   #(config websense websense service name) on page 180
#(config external-services) exit
   Exits #(config external-services) mode and returns to #(config) mode.
#(config external-services) inline http {icap-patience-details |
   icap-patience-header | icap-patience-help | icap-patience-summary}
   Customizes ICAP patience page details for HTTP connections.
#(config external-services) inline ftp icap-patience-details
   Customizes ICAP patience page details for FTP connections.
#(config external-services) view
   Shows external services and external service groups.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) external-services
SGOS#(config external-services) create websense testwebsense ok
SGOS#(config external-services) exit
SGOS#(config)
```

#(config icap icap service name)

Synopsis

These commands allow you to edit ICAP parameters.

Syntax

```
#(config) external-services
```

This changes the prompt to:

```
#(config external-services) create icap icap_service_name
#(config external-services) edit icap_service_name
```

This changes the prompt to:

```
#(config icap icap_service_name)
```

```
#(config icap icap_service_name) exit
Exits #(config ICAP name) mode and returns to #(config external-services) mode.
```

```
#(config icap icap_service_name) max_conn max_num_connections
Sets the maximum number of connections for the ICAP service.
```

```
#(config icap icap_service_name) methods {REQMOD | RESPMOD}
Sets the method supported by the ICAP service. REQMOD is request modification and RESPMOD is response modification.
```

```
#(config icap_icap_service_name) no send {client-address | server-address}
Specifies what should not be sent to the ICAP server.
```

```
#(config icap icap_service_name) no notify virus-detected
Specifies no notification to the administrator when a virus is detected.
```

```
#(config icap icap_service_name) no patience-page Specifies that patience pages do not get served.
```

```
#(config icap icap_service_name) no preview
Specifies that previews do not get sent.
```

```
#(config icap icap_service_name) notify virus-detected
Specifies notification when viruses are found.
```

```
#(config icap icap_service_name) patience-page seconds

Sets the number of seconds (5 to 65535) to wait before serving a patience page.
```

```
#(config icap icap_service_name) preview-size bytes
Sets the preview size for the ICAP service.
```

```
#(config icap icap_service_name) send client-address
Specifies that the client address be sent to the ICAP service.
```

```
#(config icap icap_service_name) send server-address
Specifies that the server address be sent to the ICAP service.
```

```
#(config icap icap_service_name) sense-settings
Senses the service's setting by contacting the server.
```

```
#(config icap icap_service_name) timeout seconds
Sets the connection timeout for the ICAP services.
```

```
#(config icap icap_service_name) url url Sets the URL for the ICAP services.
```

#(config icap icap_service_name) view
Displays the service's current configuration.

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) external-services
SGOS#(config external-services) edit testicap
SGOS#(config icap testicap) send client-address
ok
SGOS#(config icap testicap) exit
SGOS#(config external-services) exit
SGOS#(config)
```

#(config service-group service_group_name)

Synopsis

These commands allow you to edit service group parameters.

Syntax

```
#(config) external-services
This changes the prompt to:
    #(config external-services) create service-group service_group_name
    #(config external-services) edit service_group_name
This changes the prompt to:
    #(config service-group service_group_name)
```

Subcommands

```
#(config service-group service_group_name) add entry_name
   Adds an entry to this service group.
#(config service-group service_group_name) edit entry_name
   Changes the prompt to #(config service-group service group name entry name).
   #(config service-group service_group_name entry_name) exit
       Exits # (config service-group name/entry name) mode and returns to # (config
       service-group name) mode.
   #(config service-group service_group_name entry_name) view
       Shows this entry's configuration.
   #(config service-group service group name entry name) weight 0 to 255
       Modifies this entry's weight.
#(config service-group service_group_name) exit
   Exits #(config service-group name) mode and returns to #(config external-services)
   mode.
#(config service-group service_group_name) remove entry_name
   Removes an entry from this service group.
#(config service-group service group name) view
   Displays this service group's configuration.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) external-services
SGOS#(config external-services) edit testgroup
SGOS#(config service-group testgroup) add testentry
ok
SGOS#(config service-group testgroup) exit
SGOS#(config external-services) exit
SGOS#(config)
```

```
SGOS#(config) external-services
SGOS#(config external-services) edit testgroup
SGOS#(config service-group testgroup) edit testentry
SGOS#(config service-group testgroup testentry) weight 223
ok
SGOS#(config service-group testgroup testentry) exit
SGOS#(config service-group testgroup) exit
SGOS#(config external-services) exit
SGOS#(config)
```

#(config websense websense service name)

Synopsis

These commands allow you to edit Websense parameters.

Syntax

```
#(config) external-services
```

This changes the prompt to:

```
#(config external-services) create websense websense_service_name
#(config external-services) edit websense_service_name
```

This changes the prompt to:

#(config websense websense_service_name)

```
#(config websense websense_service_name) apply-by-default
Applies Websense by default.
```

```
#(config websense websense_service_name) exit
Exits #(config websense websense_service_name) mode and returns to #(config
external-services) mode.
```

```
#(config websense websense_service_name) fail-open
Fail open if service is applied by default.
```

```
#(config websense websense_service_name) host hostname Remote Websense hostname or IP address.
```

```
#(config websense websense_service_name) max-conn max_num_connections
Specifies the maximum number of concurrent connections
```

```
#(config websense websense_service_name) no apply-by-default Does not apply service by default.
```

```
#(config websense websense_service_name) no fail-open
Fail closed if service is applied by default.
```

```
#(config websense websense_service_name) no send {client-address | client-info}
Negates send options.
```

```
#(config websense websense_service_name) no serve-exception-page Serves Websense message when content is blocked.
```

```
#(config websense websense_service_name) port port
Port number of remote Websense server.
```

```
#(config websense websense_service_name) send client-address
Sends the client address to the Websense server.
```

```
#(config websense websense_service_name) send client-info
Sends the client information to the Websense server.
```

```
#(config websense websense_service_name) sense-categories
Sense categories configured on the Websense server.
```

```
#(config websense websense_service_name) serve-exception-page Serves built-in exception page when content is blocked.
```

```
#(config websense websense_service_name) test-url url Tests a url against the Websense server.
```

```
#(config websense websense_service_name) timeout seconds
   Sets the receive timeout in seconds.

#(config websense websense_service_name) version {4.3 | 4.4}
   Sets the version of the Websense server.

#(config websense websense_service_name) view
   Displays the service's current configuration.
```

For More Information

□ Volume 8: Managing Content

```
SGOS#(config) external-services
SGOS#(config external-services) edit testwebsense
SGOS#(config websense testwebsense) send client-address
ok
SGOS#(config websense testwebsense) exit
SGOS#(config external-services) exit
SGOS#(config)
```

#(config) failover #(config) failover

#(config) failover

Synopsis

These commands allow you to configure redundancy into your network.

Syntax

```
#(config) failover
This changes the prompt to:
   #(config failover)
```

Subcommands

```
#(config failover) create group_address
   Creates a failover group.
#(config failover) delete group address
   Deletes a failover group.
#(config failover) edit group_address
   Changes the prompt to # (config failover group address).
   #(config failover group_address) {disable | enable}
       Disables or enables failover group indicated by group_address.
   #(config failover group_address) encrypted-secret encrypted_secret
       (Optional but recommended) Refers to an encrypted password shared only with the group.
   #(config failover group_address) exit
       Exits #(config failover group address) mode and returns to #(config failover)
   #(config failover group address) interval interval in seconds
       (Optional) Refers to the time between advertisements from the master to the multicast address. The
       default is 40 seconds.
   #(config failover group address) master
       Defines the current system as the master and all other systems as slaves.
   #(config failover group_address) multicast-address multicast_address
       Refers to a multicast address where the master sends the keepalives (advertisements) to the slave
   #(config failover group address) no interval
       Resets the interval to the default value (40 seconds).
   #(config failover group address) no multicast-address
       Removes the multicast address from the failover group.
   #(config failover group_address) no master
       Removes as configured master.
   #(config failover group address) no priority
       Resets the priority to the default value (100).
   #(config failover group address) no secret
       Clears the secret from the failover group.
   #(config failover group_address) priority relative_priority
       (Optional) Refers to the rank of slave systems. The range is from 1 to 253. (The master system, the
       one whose IP address matches the group address, gets 254.)
```

#(config) failover #(config) failover

```
#(config failover group_address) secret secret
     (Optional but recommended) Refers to a password shared only with the group. You can create a secret, which is then hashed.

#(config failover group_address) view
     Shows the current settings for the failover group indicated by group_address.

#(config failover) exit
     Exits #(config failover) mode and returns to #(config) mode.

#(config failover) view {configuration [group_address | <Enter>] | statistics}
     View the configuration of a group or all groups or view all statistics.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) failover
SGOS#(config failover) create 10.9.17.135 ok
SGOS#(config failover) exit
SGOS#(config)
SGOS#(config)
SGOS#(config failover
SGOS#(config failover) edit 10.9.17.135
SGOS#(config failover 10.9.17.135) master ok
SGOS#(config failover 10.9.17.135) exit
SGOS#(config failover) exit
```

#(config) forwarding #(config) forwarding

#(config) forwarding

Synopsis

Configures forwarding of content requests to defined hosts and groups through policy.

Syntax

```
#(config) forwarding
This changes the prompt to:
#(config forwarding)
```

Subcommands

```
#(config forwarding) create {host_alias host_name [http[=port] [https[=port]
        [ftp[=port] [mms[=port] [rtsp[=port] [tcp=port] [telnet[=port]
        [ssl-verify-server[=yes | =no]] [group=group_name] [server | proxy] }
    Creates a forwarding host/group. The only required entries under the create option (for a host) are host_alias, host_name, a protocol, and a port number. The port number can be defined explicitly (i.e., http=8080), or it can take on the default port value of the protocol, if one exists (i.e., enter http, and the default port value of 80 is entered automatically).
```

To create a host group, you must also include the group=group_name command. If this is the first mention of the group, group_name, then that group is automatically created with this host as its first member. Do not use this command when creating an independent host.

```
#(config forwarding) delete all
   Deletes all forwarding hosts and groups.
#(config forwarding) delete group group name
   Deletes only the group identified by group_name.
#(config forwarding) delete host host alias
   Deletes only the host identified by host alias.
#(config forwarding) download-via-forwarding {disable | enable}
   Disables or enables configuration file downloading using forwarding.
#(config forwarding) edit host_or_group_alias
   Changes the prompt to:
       #(config forwarding group alias) on page 187
       #(config forwarding host alias) on page 188
#(config forwarding) exit
   Exits # (config forwarding) mode and returns to # (config) mode.
#(config forwarding) failure-mode {closed | open}
   Sets the default forwarding failure mode to closed or open.
#(config forwarding) host-affinity method {accelerator-cookie
   [host_or_group_alias] | client-ip-address [host_or_group_alias] | default
   host or group alias | no [host or group alias] }
   Selects a host affinity method (non-SSL). If a host or group alias is not specified for the
   accelerator-cookie, client-ip-address, or no options, the global default is used. Use the
   default option to specify default configurations for all the settings for a specified host or group.
```

#(config) forwarding #(config) forwarding

```
#(config forwarding) host-affinity ssl-method {accelerator-cookie
    [host_or_group_alias] | client-ip-address [host_or_group alias] | default
    host or group alias | no [host or group alias] | ssl-session-id
    [host or group alias] }
   Selects a host affinity method for SSL. If a host or group alias is not specified for the
    accelerator-cookie, client-ip-address, no, or ssl-session-id options, the global default is
    used. Use the default option to specify default configurations for all the settings for a specified host or
   group.
#(config forwarding) host-affinity timeout minutes
   Sets the timeout in minutes for the host affinity.
#(config forwarding) integrated-host-timeout minutes
   Sets the timeout for aging out unused integrated hosts.
#(config forwarding) load-balance hash {default group alias | domain
    [group_alias] | no [group_alias] | url [group_alias] }
   Sets if and how load balancing hashes between group members. If a group alias is not specified for the
   domain, url, or no options, the global default is used. Use the default option to specify default
   configurations for all the settings for a specified group.
#(config forwarding) load-balance method {default host_or_group_alias |
    least-connections [host_or_group_alias] | no [host_or_group_alias] |
   round-robin [host_or_group_alias] }
   Sets the load balancing method. If a host or group alias is not specified for the least-connections,
   round-robin, or no options, the global default is used. Use the default option to specify default
   configurations for all the settings for a specified host or group.
#(config forwarding) no path
   Negates certain forwarding settings.
#(config forwarding) path url
   Sets the network path to download forwarding settings.
#(config forwarding) sequence add host or group alias
   Adds an alias to the end of the default failover sequence.
#(config forwarding) sequence clear
   Clears the default failover sequence.
#(config forwarding) sequence demote host or group alias
   Demotes an alias one place towards the end of the default failover sequence.
#(config forwarding) sequence promote host or group alias
   Promotes an alias one place towards the start of the default failover sequence.
#(config forwarding) sequence remove host_or_group_alias
   Removes an alias from the default failover sequence.
#(config forwarding) view
    Displays the currently defined forwarding groups or hosts.
```

For More Information

□ Volume 6: Advanced Networking

#(config) forwarding #(config) forwarding

```
SGOS#(config) forwarding
SGOS#(config forwarding) download-via-forwarding disable
ok
SGOS#(config forwarding) failure-mode closed
ok
SGOS#(config forwarding) host-affinity method client-ip-address
ok
SGOS#(config forwarding) load-balance hash domain group_name1
ok
SGOS#(config forwarding) exit
SGOS#(config)
```

#(config forwarding group alias)

Synopsis

These commands allow you to edit the settings of a specific forwarding group.

Syntax

```
#(config) forwarding
This changes the prompt to:
    #(config forwarding) create host_alias hostname protocol=port group=group_alias
    #(config forwarding) edit group_alias
This changes the prompt to:
    #(config forwarding group_alias)
```

Subcommands

```
#(config forwarding group alias) exit
   Exits #(config forwarding group alias) mode and returns to #(config forwarding)
   mode.
#(config forwarding group_alias) host-affinity method {accelerator-cookie |
   client-ip-address | default}
   Changes the host affinity method (non-SSL) for this group.
#(config forwarding group_alias) host-affinity ssl-method {accelerator-cookie |
   client-ip-address | default | ssl-session-id}
   Changes the host affinity method (SSL) for this group.
#(config forwarding group_alias) load-balance hash {default | domain | url}
   Changes if and how load balancing hashes between group members.
#(config forwarding group_alias) load-balance method {default |
   least-connections | round-robin}
   Changes the load balancing method.
#(config forwarding group alias) no host-affinity {method | ssl-method}
   Disables a host affinity setting for this group
#(config forwarding group alias) load-balance {hash | method}
   Disables a load balancing setting for this group.
#(config forwarding group alias) view
   Shows the current settings for this forwarding group.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) forwarding
SGOS#(config forwarding) edit test_group
SGOS#(config forwarding test_group) load-balance hash domain ok
SGOS#(config forwarding test_group) exit
SGOS#(config forwarding) exit
SGOS#(config)
```

#(config forwarding host alias)

Synopsis

These commands allow you to edit the settings of a specific forwarding host.

Syntax

```
#(config) forwarding
This changes the prompt to:
   #(config forwarding) create host alias hostname protocol=port
   #(config forwarding) edit host alias
This changes the prompt to:
   #(config forwarding host alias)
Subcommands
```

```
#(config forwarding host_alias) exit
    Exits #(config forwarding host alias) mode and returns to #(config forwarding) mode.
#(config forwarding host_alias) ftp [port]
   Changes the FTP port to the default port or to a port that you specify.
#(config forwarding host_alias) group group_name
   Specifies the group (or server farm or group of proxies) to which this host belongs.
    The SG appliance uses load balancing to evenly distribute forwarding requests to the origin
   servers or group of proxies. Do not use the group option when creating independent hosts.
#(config forwarding host_alias) host host_name
   Changes the host name.
#(config forwarding host alias) host-affinity method {accelerator-cookie |
    client-ip-address | default}
   Changes the host affinity method (non-SSL) for this host.
#(config forwarding host_alias) host-affinity ssl-method {accelerator-cookie |
    client-ip-address | default | ssl-session-id}
   Changes the host affinity method (SSL) for this host.
#(config forwarding host_alias) http [port]
   Changes the HTTP port to the default port or to a port that you specify.
#(config forwarding host alias) https [port]
   Changes the HTTPS port to the default port or to a port that you specify.
#(config forwarding host_alias) load-balance method {default | least-connections
    | round-robin}
   Changes the load balancing method.
#(config forwarding host_alias) mms [port]
   Changes the MMS port to the default port or to a port that you specify.
#(config forwarding host_alias) no {ftp | group | host-affinity {method |
    ssl-method | http | https | load-balance method | mms | rtsp |
    ssl-verify-server | tcp | telnet}
   Deletes a setting for this host.
#(config forwarding host alias) proxy
    Makes the host a proxy instead of a server; any HTTPS or TCP ports are deleted.
```

```
#(config forwarding host_alias) rtsp [port]
    Changes the RTSP port to the default port or to a port that you specify.
#(config forwarding host_alias) server
    Makes the host a server instead of a proxy.

#(config forwarding host_alias) ssl-verify-server
    Sets SSL to verify server certificates.

#(config forwarding host_alias) tcp [port]
    Changes the TCP port to the default port or to a port that you specify.

#(config forwarding host_alias) telnet [port]
    Changes the Telnet port to the default port or to a port that you specify.

#(config forwarding host_alias) view
    Shows the current settings for this forwarding host.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) forwarding
SGOS#(config forwarding) edit test_host
SGOS#(config forwarding test_host) server
ok
SGOS#(config forwarding test_host) exit
SGOS#(config forwarding) exit
```

#(config) front-panel #(config) front-panel

#(config) front-panel

Synopsis

Use this command to configure the front panel. For instance, the front-panel LCD behavior can be configured using the backlight command.

Syntax

```
#(config) front-panel
This changes the prompt to:
#(config front-panel)
```

Subcommands

```
#(config front-panel) backlight flash
   The front-panel LCD is configured to flash, which can, for instance, help you locate a particular
   appliance in a room full of appliances.
#(config front-panel) backlight state {off | on | timeout}
   The front-panel LCD is configured to be always turned on, always turned off, or to turn off after a
   specified length of time (use the backlight timeout command to configure the length of time).
#(config front-panel) backlight timeout seconds
   Configures the length of time before the front-panel LCD turns off. You must also set the backlight
    state timeout command to configure timeout mode.
#(config front-panel) exit
   Exits #(config front-panel) mode and returns to #(config) mode.
#(config front-panel) hashed-pin hashed PIN
   Specifies a front-panel PIN in hashed format.
#(config front-panel) no backlight flash
   Stops the front-panel LCD from flashing.
#(config front-panel) pin PIN
   Sets a four-digit PIN to restrict access to the front panel of the SG appliance. To clear the PIN, specify
   0000 instead of a real PIN.
#(config front-panel) view
    Displays the front panel settings.
```

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
SGOS#(config) front-panel
SGOS#(config front-panel) backlight state timeout ok
SGOS#(config front-panel) backlight timeout 60 ok
SGOS#(config front-panel) exit
SGOS#(config)
```

#(config) ftp #(config) ftp

#(config) ftp

Synopsis

Use this command to configure FTP parameters.

Syntax

```
#(config) ftp login-syntax {raptor | checkpoint}
    Toggles between Raptor and Checkpoint login syntax. The default is Raptor.
#(config) ftp no welcome-banner
    No text is displayed to an FTP client when a connection occurs.
#(config) ftp welcome-banner banner
    Customizes the text displayed to an FTP client when a connection occurs.
```

For More Information

- □ Volume 3: Proxies and Proxy Services
- \square #(config caching ftp) on page 126

```
\begin{tabular}{ll} SGOS \ \# (config) \ \ \mbox{\bf ftp login-syntax checkpoint} \\ ok \end{tabular}
```

#(config) health-check

Synopsis

Use this command to configure health check settings.

Note: Using the pause command to temporarily pause the forwarding or SOCKS gateways health checks causes the system to stay in pause mode until you use the resume command to end it—rebooting the system does not cause paused health checks to resume.

Syntax

```
#(config) health-check
This changes the prompt to:
    #(config health-check)
```

Subcommands

```
#(config health-check) create entry_name
   Adds a health check entry specified by entry name.
#(config health-check) delete entry name
   Deletes the specified health check entry.
#(config health-check) edit entry name
   Changes the prompt. See # (config health-check entry name) on page 194.
#(config health-check) exit
   Exits #(config health check) mode and returns to #(config) mode.
#(config health-check) forwarding failcount count
   Configures the forwarding health check failure count.
#(config health-check) forwarding interval seconds
   Configures the forwarding health check interval in seconds.
#(config health-check) forwarding pause
   Pauses the forwarding health checks temporarily (the system remains in pause mode until you use the
   resume command to end it).
#(config health-check) forwarding resume
   Resumes the forwarding health checks.
#(config health-check) forwarding type {http object | https object | layer-3 |
   layer-4}
   Configures the forwarding health check type.
#(config health-check) socks-gateways failcount count
   Configures the SOCKS gateways health check failure count.
#(config health-check) socks-gateways interval seconds
   Configures the SOCKS gateways health check interval in seconds.
#(config health-check) socks-gateways pause
   Pauses the forwarding health checks temporarily (the system remains in pause mode until you use the
   resume command to end it).
#(config health-check) socks-gateways resume
   Resumes the SOCKS gateways health checks.
```

```
#(config health-check) socks-gateways type {layer-3 | layer-4}
    Configures the SOCKS gateways health check type.

#(config health-check) statistics
    Displays health check statistics.

#(config health-check) view
    Displays the current health check configurations for forwarding and SOCKS gateways settings.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) health-check
SGOS#(config health-check) socks-gateways type layer-3
  ok
SGOS#(config health-check) exit
SGOS#(config)
```

#(config health-check entry_name)

Synopsis

Use this command to edit health check entries.

Syntax

```
#(config) health-check
This changes the prompt to:
    #(config health-check) create entry_name
    #(config health-check) edit entry_name
This changes the prompt to:
    #(config health-check entry name)
```

Subcommands

- # (config health-check entry_name) exit
 Exits #(config health check entry_name) mode and returns to #(config health check)
 mode.
- # (config health-check entry_name) failure-trigger trigger Sets failure count to trigger a health check.
- # (config health-check entry_name) http url url Configures HTTP health check parameters.
- # (config health-check entry_name) https url url Configures HTTPS health check parameters.
- # (config health-check entry_name) icap service-name service_name Configures ICAP health check parameters.
- # (config health-check entry_name) interval healthy interval_in_seconds
 Configures the health check healthy intervals.
- # (config health-check entry_name) interval sick interval_in_seconds
 Configures the health check sick intervals.
- # (config health-check entry_name) layer-3 hostname hostname
 Configures layer-3 health check parameters
- # (config health-check entry_name) layer-4 hostname hostname Configures layer-4 health check parameters.
- # (config health-check entry_name) layer-4 port port
- # (config health-check entry_name) no notify
 Disables e-mail notification of state changes.
- # (config health-check entry_name) notify
 Enables e-mail notification of state changes.
- # (config health-check entry_name) perform-health-check Performs a health check.
- # (config health-check entry_name) statistics
 Shows current health check statistics.
- # (config health-check entry_name) threshold healthy threshold
 The number of successful checks before a transition to healthy.

```
# (config health-check entry_name) threshold sick threshold
   The number of failed checks before a transition to sick.
# (config health-check entry_name) type {layer-3 | layer-4 | http | https | icap
    | websense4-offbox}
   layer-3: Performs layer-3 health checks.
   layer-4: Performs layer-4 health checks.
   http: Performs HTTP health checks.
   https: Performs HTTPS health checks.
   icap: Performs ICAP health checks.
   websense4-offbox: Performs Websense health checks.
# (config health-check entry_name) view
   Shows the entry's current configuration.
# (config health-check entry_name) websense-offbox {default-url | service-name
    service_name | url test_url}
   default-url: Uses the default Websense URL for health checks.
   service-name service_name: Configures the Websense service-name to health check.
   url test_url: Configures the Websense URL to health check.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) health-check
SGOS#(config health-check) edit testhealthcheck
SGOS#(config health-check testhealthcheck) type https
ok
SGOS#(config health-check testhealthcheck) exit
SGOS#(config health-check) exit
SGOS#(config)
```

#(config) hide-advanced

See

□ # hide-advanced on page 52.

#(config) hostname #(config) hostname

#(config) hostname

Synopsis

Use this command to assign a name to an SG appliance. Any descriptive name that helps identify the system is sufficient.

Syntax

```
#(config) hostname name
Associates name with the current SG appliance.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) hostname "Blue Coat Demo" ok
```

#(config) http #(config) http

#(config) http

Synopsis

Use this command to configure HTTP settings.

Enables HTTP byte-range support.

Syntax

```
#(config) http [no] add-header client-ip
   Adds the client-ip header to forwarded requests.
#(config) http [no] add-header front-end-https
   Adds the front-end-https header to forwarded requests.
#(config) http [no] add-header via
   Adds the via header to forwarded requests.
#(config) http [no] add-header x-forwarded-for
   Adds the x-forwarded-for header to forwarded requests.
#(config) http [no] byte-ranges
```

If byte-range support is disabled, then HTTP treats all byte range requests as non-cacheable. This means that HTTP never even checks to see if the object is in the cache, but forwards the request to the origin-server and does not cache the result. So the range request has no affect on the cache. For instance, if the object was in the cache before a range request, it would still be in the cache afterward—the range request does not delete any currently cached objects. Also, the Range header is not modified when forwarded to the origin-server.

If the requested byte range is type 3 or 4, then the request is treated as if byte-range support is disabled. That is, the request is treated as non-cacheable and has no affect on objects in the cache.

```
#(config) http [no] cache authenticated-data
   Caches any data that appears to be authenticated.
#(config) http [no] cache expired
    Retains cached objects older than the explicit expiration.
#(config) http [no] cache personal-pages
   Caches objects that appear to be personal pages.
#(config) http [no] force-ntlm
    Uses NTLM for Microsoft Internet Explorer proxy.
#(config) http ftp-proxy-url root-dir
    URL path is absolute in relation to the root.
#(config) http ftp-proxy-url user-dir
   URL path is relative to the user's home directory.
```

#(config) http [no] parse meta-tag {cache-control | expires | pragma-no-cache} Parses HTML objects for the cache-control, expires, and pragma-no-cache meta-tags.

```
#(config) http [no] persistent client
   Enables support for persistent client requests from the browser.
#(config) http [no] persistent server
```

Enables support for persistent server requests to the Web server.

#(config) http [no] persistent-timeout client num_seconds Sets persistent connection timeout for the client to num seconds.

#(config) http [no] persistent-timeout server num_seconds Sets persistent connection timeout for the server to num_seconds.

#(config) http

```
#(config) http [no] pipeline client {requests | redirects}
   Prefetches either embedded objects in client requests or redirected responses to client requests.
#(config) http [no] pipeline prefetch {requests | redirects}
   Prefetches either embedded objects in pipelined objects or redirected responses to pipelined requests.
#(config) http [no] proprietary-headers bluecoat
   Enables the Blue Coat proprietary HTTP header extensions.
#(config) http receive-timeout client num seconds
   Sets receive timeout for client to num_seconds.
#(config) http receive-timeout refresh num seconds
   Sets receive timeout for refresh to num seconds.
#(config) http receive-timeout server num_seconds
   Sets receive timeout for server to num_seconds.
#(config) http [no] revalidate-pragma-no-cache
   Revalidates "Pragma: no-cache."
#(config) http [no] strict-expiration refresh
    Forces compliance with explicit expirations by never refreshing objects before their explicit expiration.
#(config) http [no] strict-expiration serve
   Forces compliance with explicit expirations by never serving objects after their explicit expiration.
#(config) http [no] strip-from-header
    Removes HTTP information from headers.
#(config) http [no] substitute conditional
    Uses an HTTP "get" in place of HTTP 1.1 conditional get.
#(config) http [no] substitute ie-reload
   Uses an HTTP "get" for Microsoft Internet Explorer reload requests.
#(config) http [no] substitute if-modified-since
   Uses an HTTP "get" instead of "get-if-modified."
#(config) http [no] substitute pragma-no-cache
   Uses an HTTP "get" instead of "get pragma: no-cache."
#(config) http [no] tolerant-request-parsing
   Enables or disables the HTTP tolerant-request-parsing flag.
#(config) http upload-with-pasv disable
   Disables uploading with Passive FTP.
#(config) http upload-with-pasv enable
    Enables uploading with Passive FTP.
#(config) http version {1.0 | 1.1}
   Indicates the version of HTTP that should be used by the SG appliance.
#(config) http [no] www-redirect
    Redirects to www.host.com if host not found.
#(config) http [no] xp-rewrite-redirect
    Rewrites origin server 302s to 307s for Windows XP IE requests.
```

For More Information

- □ #(config http) on page 230
- # (config http-console) on page 130
- Volume 3: Proxies and Proxy Services

#(config) icp #(config) icp

#(config) icp

Synopsis

ICP is a caching communication protocol. It allows a cache to query other caches for an object, without actually requesting the object. By using ICP, the SG appliance determines if the object is available from a neighboring cache, and which device provides the fastest response.

After you have created the ICP or advanced forwarding configuration file, place the file on an FTP or HTTP server so it can be downloaded to the SG appliance.

Syntax

```
#(config) icp no path
   Negates the path previously set using the command icp path url.
#(config) icp path url
   Specifies the network location of the ICP configuration file to download.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) icp path 10.25.36.47/files/icpconfig.txt ok
```

#(config) identd #(config) identd

#(config) identd

Synopsis

IDENTD implements the TCP/IP IDENT user identification protocol. IDENTD operates by looking up specific TCP/IP connections and returning the user name of the process owning the connection.

Syntax

```
#(config) identd
This changes the prompt to:
#(config identd)
```

Subcommands

```
#(config identd) disable
   Disables IDENTD.

#(config identd) enable
   Enables IDENTD.

#(config identd) exit
   Exits configure identd mode and returns to configure mode.

#(config identd) view
   Displays current IDENTD settings.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) identd
SGOS#(config identd) enable
  ok
SGOS#(config identd) exit
SGOS#(config)
```

#(config) im #(config) im

#(config) im

Synopsis

You can configure the IM proxy settings, assign an administrator buddy name for each client type, and determine how exception messages are sent.

Syntax

```
#(config) im aol-admin-buddy buddy
   Set AOL admin buddy name.
#(config) im aol-direct-proxy-host host
   Set AOL direct proxy host.
#(config) im aol-http-host host
   Set AOL HTTP host.
#(config) im aol-native-host host
   Set AOL native host
#(config) im buddy-spoof-message message_text
   Set buddy spoof message.
#(config) im exceptions {in-band | out-of-band}
   in-band: Deliver IM exceptions in band.
   out-of-band: Deliver IM exceptions out of band.
#(config) im explicit-proxy-vip virtual_IP_address
   Set explicit proxy virtual IP address.
#(config) im msn-admin-buddy buddy
   Set MSN admin buddy name.
#(config) im msn-http-host host
   Set MSN HTTP host.
#(config) im msn-native-host host
   Set MSN native host.
#(config) no explicit-proxy-vip
   Disables explicit proxy VIP support.
#(config) im yahoo-admin-buddy buddy
   Set Yahoo admin buddy name.
#(config) im yahoo-download-host host
   Set Yahoo download host.
#(config) im yahoo-http-host host
   Set Yahoo HTTP host.
#(config) im yahoo-http-chat-host host
   Set Yahoo HTTP chat host.
#(config) im yahoo-native-host host
   Set Yahoo native host.
#(config) im yahoo-upload-host host
   Set Yahoo upload host.
```

For More Information

□ Volume 4: Web Communication Proxies

#(config) im

```
SGOS#(config) im exceptions in-band ok
SGOS#(config) im yahoo-admin-buddy testname ok
```

#(config) inline

#(config) inline

See

□ # inline on page 53.

#(config) installed-systems

Synopsis

Use this command to manage the list of installed SG systems.

Syntax

```
#(config) installed-systems
This changes the prompt to:
#(config installed-systems)
```

Subcommands

```
#(config installed-systems) default system number
   Sets the default system to the system indicated by <code>system_number</code>.
#(config installed-systems) delete system number
    Deletes the system indicated by system_number.
#(config installed-systems) exit
   Exits configure installed-systems mode and returns to configure mode.
#(config installed-systems) lock system number
    Locks the system indicated by system_number.
#(config installed-systems) no {lock system_number | replace}
    lock system_number: Unlocks the system indicated by system_number if it is currently locked.
    replace: Specifies that the system currently tagged for replacement should not be replaced. The default
    replacement is used (oldest unlocked system).
#(config installed-systems) replace system_number
   Specifies that the system identified by system_number is to be replaced next.
#(config installed-systems) view
   Shows installed SG systems.
```

For More Information

□ Volume 10: Managing the Blue Coat SG Appliance

```
SGOS#(config) installed-systems
SGOS#(config installed-systems) default 2
ok
SGOS#(config installed-systems) lock 1
ok
SGOS#(config installed-systems) exit
SGOS#(config)
```

#(config) interface #(config) interface

#(config) interface

Synopsis

This command enables you to configure the network interfaces (both physical and Virtual LAN).

The built-in Ethernet adapter is configured for the first time using the setup console. If you want to modify the built-in adapter configuration, or if you have multiple adapters, you can configure each one using the command-line interface.

Syntax

```
#(config) interface fast-ethernet interface_number
   where interface_number sets the number of the fast Ethernet connection to interface_number.
   Valid values for interface_number are 0 through 3, inclusive.

#(config) interface interface_number
   This changes the prompt to #(config interface interface_number)
```

#(config interface interface_number)

Syntax

```
#(config) interface interface_number
```

This changes the prompt to #(config interface interface number)

Subcommands

```
#(config interface interface number) allow-intercept {enable | disable}
   Allow transparent interception on this interface.*
#(config interface interface number) exit
   Exits # (config interface number) mode and returns to # (config) mode.
#(config interface interface_number) full-duplex
   Configures the interface for full-duplex.
#(config interface interface number) half-duplex
   Configures the interface for half-duplex.
#(config interface interface number) ip-address ip-address
   Sets the IP address for this interface to ip address
#(config interface interface_number) instructions {accelerated-pac | central-pac
   url | default-pac | proxy}
   accelerated-pac: Configures browser to use your accelerated pac file.
   central-pac: Configures browser to use your pac file.
   default-pac: Configures browser to use a Blue Coat pac file.
   proxy: Configures browser to use a proxy.
#(config interface interface_number) link-autosense {enable | disable}
   Specifies that the interface should autosense speed and duplex.
#(config interface interface_number) mtu-size size
   Specifies the MTU size.
#(config interface interface_number) no {accept-inbound | link-autosense}
   Negates the current accept-inbound or link-autosense settings.
#(config interface interface number) reject-inbound {enable | disable}
   Rejects inbound connections on the interface.*
#(config interface interface number) speed {10 | 100 | 1gb}
   Specifies the interface speed.
#(config interface interface number) subnet-mask subnet-mask
   Sets the subnet mask for the interface.
#(config interface interface_number) native-vlan number
   Sets the native VLAN value for this interface.
#(config interface interface number) vlan-trunk {enable | disable}
   Enables VLAN trunking on this interface.
#(config interface interface number) clear-all-vlans
   Resets all VLAN parameters to their default values.
#(config interface interface_number) view
   Displays the interface settings.
```

*The allow-intercept and reject-inbound commands are interface-level configurations and are not bridge-specific. The reject-inbound command always has precedence.

The following table describes how traffic is handled for the three possible settings of these options.

reject- inbound	allow-intercept	Non-proxy ports (mgmt-console, ssh, etc)	Explicit proxy ports	Transparent proxy ports	Other ports
Disabled	Enabled	Terminated	Terminated	Terminated	Forwarded
Disabled	Disabled	Terminated	Terminated	Forwarded	Forwarded
Enabled	Enabled/Disabled	Silently dropped	Silently dropped	Silently dropped	Silently dropped

For More Information

□ Volume 2: Getting Started

```
#(config) interface 0
#(config interface 0) ip-address 10.252.10.54
  ok
#(config interface 0) instructions accelerated-pac
  ok
#(config interface 0) subnet-mask 255.255.255.0
  ok
#(config interface 0) exit
SGOS#(config) interface 1
#(config interface 1) ip-address 10.252.10.72
  ok
#(config interface 1) subnet-mask 255.255.255.0
  ok
#(config interface 1) exit
```

#(config) ip-default-gateway

Synopsis

A key feature of the SG appliance is the ability to distribute traffic originating at the cache through multiple IP gateways. Further, you can fine tune how the traffic is distributed among gateways. This feature works with any routing protocol (for example, static routes or RIP).

Note: Load balancing through multiple IP gateways is independent from the per-interface load balancing that the SG appliance automatically does when more than one network interface is installed.

Syntax

```
#(config) ip-default-gateway ip_address [preference group (1-10)] [weight
    (1-100)]
Specifies the IP address of the default gateway to be used by the SG appliance.
```

For More Information

Volume 6: Advanced Networking

```
SGOS#(config) ip-default-gateway 10.25.36.47 ok
```

#(config) license-key #(config) license-key

#(config) license-key

Synopsis

Use this command to configure license key settings.

Syntax

```
#(config) license-key auto-update {disable | enable}
    Disables or enables auto-update of the Blue Coat license key.
#(config) license-key no path
    Negates certain license key settings.
#(config) license-key path url
    Specifies the network path to download the license key.
```

For More Information

□ Volume 2: Getting Started

```
SGOS#(config) license-key no path ok
```

#(config) line-vty #(config) line-vty

#(config) line-vty

Synopsis

When you have a CLI session, that session remains open as long as there is activity. If you leave the session idle, the connection eventually times out and you must reconnect. The default timeout is five minutes. You can set the timeout and other session-specific options using the line-vty command.

Syntax

```
#(config) line-vty
This changes the prompt to:
   #(config line-vty)
```

Subcommands

```
#(config line-vty) exit
   Exits configure line-vty mode and returns to configure mode.
#(config line-vty) length num lines on screen
   Specifies the number of lines of code that should appear on the screen at one time. Specify 0 to scroll
    without pausing.
#(config line-vty) no length
    Disables screen paging.
#(config line-vty) telnet {no transparent | transparent}
   Indicates that this is a Telnet protocol-specific configuration. If you specify no transparent, carriage
   returns are sent to the console as a carriage return plus linefeed. If you specify transparent, carriage
   returns are sent to the console as a carriage return.
#(config line-vty) timeout minutes
   Sets the line timeout to the number of minutes indicated by minutes.
#(config line-vty) view
    Displays running system information.
```

```
SGOS#(config) line-vty
SGOS#(config line-vty) timeout 60
SGOS#(config line-vty) exit
SGOS#(config)
```

#(config) load

#(config) load

See

□ # load on page 57.

#(config) mapi #(config) mapi

#(config) mapi

Synopsis

Configures MAPI

Syntax

```
SGOS#(config) mapi
This changes the prompt to:
SGOS#(config mapi) [subcommands]
```

Subcommands

```
SGOS#(config mapi) batching {enable | disable}
   Enables or disables batching. The default is enabled.
SGOS#(config mapi) exit
   Exits the mapi mode and returns to SGOS#(config) mode.
SGOS#(config mapi) handoff (enable | disable}
   Use the endpoint-mapper service. The default is enabled.
SGOS#(config mapi) keep-alive duration 1-168
   Sets the length of time, in hours, that the session is active. The default is 72 hours.
SGOS#(config mapi) keep-alive {enable | disable}
    Enables the keep-alive configuration. The default is disabled.
SGOS#(config mapi) keep-alive interval 15-60
   Sets the length of time, in minutes, before the service checks for new e-mail. The default is 30 minutes.
SGOS#(config map) keep-alive max-sessions 1-200
   Sets the maximum number of active sessions at any given point. The default is 100 sessions. If the limit is
   reached, the oldest session is dropped.
SGOS#(config mapi) view
   Views the MAPI configuration.
```

For More Information

"#(config endpoint-mapper)" on page 228

```
SGOS#(config mapi) view
Batching: enabled
Keep-Alive: disabled
Keep-Alive Duration (hours): 72
Keep-Alive Interval (minutes): 30
Keep-Alive Maximum Sessions: 100
Endpoint Mapper Handoff: enabled
```

#(config) netbios #(config) netbios

#(config) netbios

Synopsis

Use this command to configure NetBIOS.

Syntax

```
#(config) netbios
This changes the prompt to:
    #(config netbios)
#(config netbios) exit
    Exits configure netbios mode and returns to configure mode.

#(config netbios) nbstat requester {retries | timeout} | responder {enable | disable}
    Requester is enabled by default, with three retries and a five-second timeout. Responder is disabled by default.

#(config netbios) view
    Shows the NetBIOS settings.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) netbios
SGOS#(config netbios) nbstat responder enable
ok
SGOS#(config netbios) exit
SGOS#(config)
ok
```

#(config) no #(config) no

#(config) no

Synopsis

Use this command to negate the current settings for the archive configuration, content priority, IP default gateway, SOCKS machine, or system upgrade path.

Syntax

```
#(config) no archive-configuration
   Clears the archive configuration upload site.
#(config) no bridge bridge_name
   Clears the bridge configuration.
#(config) no content {priority {regex regex | url url} | outstanding-requests
   {delete | priority | revalidate} regex}
   priority {regex regex | url url: Removes a deletion regular expression policy or a deletion URL
   policy.
   outstanding-requests {delete | priority | revalidate} regex: Deletes a specific,
   regular expression command in-progress (revalidation, priority, or deletion).
#(config) no ip-default-gateway ip_address
   Sets the default gateway IP address to zero.
#(config) no serial-number
   Removes the serial number.
#(config) no socks-machine-id
   Removes the SOCKS machine ID from the configuration.
#(config) no upgrade-path
   Clears the upgrade image download path.
```

For More information

- Volume 2: Getting Started
- Volume 6: Advanced Networking

```
SGOS#(config) no archive-configuration
ok
SGOS#(config) no content priority regex http://.*cnn.com
ok
SGOS#(config) no content priority url http://www.bluecoat.com
ok
SGOS#(config) no ip-default-gateway 10.252.10.50
ok
SGOS#(config) no socks-machine-id
ok
SGOS#(config) no upgrade-path
ok
```

#(config) ntp #(config) ntp

#(config) ntp

Synopsis

Use this command to set NTP parameters. Network Time Protocol (NTP) is a protocol that is used to synchronize computer clock times in a network of computers. The SG appliance sets the UTC time by connecting to an NTP server. The SG appliance includes a list of NTP servers available on the Internet. If an NTP server is not available, you can set the time manually using the Management Console.

Syntax

```
#(config) ntp clear
   Removes all entries from the NTP server list.
#(config) ntp disable
   Disables NTP.
#(config) ntp enable
   Enables NTP.
#(config) ntp interval minutes
   Specifies how often to perform NTP server queries.
#(config) ntp no server domain_name
   Removes the NTP server named domain_name from the NTP server list.
#(config) ntp server domain_name
   Adds the NTP server named domain_name from the NTP server list.
```

For More Information

□ Volume 2: Getting Started

```
SGOS#(config) ntp server clock.tricity.wsu.edu ok
```

#(config) policy #(config) policy

#(config) policy

Synopsis

Use this command to specify central and local policy file location, status, and other options.

Syntax

```
#(config) policy central-path url
   Specifies the network path (indicated by url) from which the central policy file can be downloaded.
#(config) policy forward-path url
   Specifies the network path (indicated by url) from which the forward policy file can be downloaded.
#(config) policy local-path url
   Specifies the network path (indicated by ur1) from which the local policy file can be downloaded.
#(config) policy no central-path
   Specifies that the current central policy file URL setting should be cleared.
#(config) policy no forward-path
   Specifies that the current forward policy file URL setting should be cleared.
#(config) policy no local-path
   Specifies that the current local policy file URL setting should be cleared.
#(config) policy no notify
   Specifies that no e-mail notification should be sent if the central policy file should change.
#(config) policy no subscribe
    Specifies that the current policy should not be automatically updated in the event of a central policy
    change.
#(config) policy no vpm-cpl-path
   Clears the network path to download VPM CPL policy.
#(config) policy no vpm-software
   Clears the network path to download VPM software.
#(config) policy no vpm-xml-path
   Clears the network path to download VPM XML policy.
#(config) policy notify
   Specifies that an e-mail notification should be sent if the central policy file should change.
#(config) policy order order of v)pm, l)ocal, c)entral
   Specifies the policy evaluation order.
#(config) policy poll-interval minutes
   Specifies the number of minutes that should pass between tests for central policy file changes.
#(config) policy poll-now
   Tests for central policy file changes immediately.
#(config) policy proxy-default {allow | deny}
    allow: The default proxy policy is allow.
    deny: The default proxy policy is deny.
#(config) policy reset
   Clears all policies.
#(config) policy subscribe
    Indicates that the current policy should be automatically updated in the event of a central policy change.
#(config) policy vpm-cpl-path url
```

Specifies the network path (indicated by ur1) from which the vpm-cpl policy file can be downloaded.

#(config) policy #(config) policy

```
#(config) policy vpm-software url
    Specifies the network path to download the VPM software.
#(config) policy vpm-xml-path url
    Specifies the network path (indicated by url) from which the vpm-xml policy file can be downloaded.
```

For More Information

□ Volume 7: VPM and Advanced Policy

```
SGOS#(config) policy local-path http://www.server1.com/local.txt ok
SGOS#(config) policy central-path http://www.server2.com/central.txt ok
SGOS#(config) policy poll-interval 10
```

#(config) profile

#(config) profile

Synopsis

Sets your system profile to normal (the default setting) or portal (to accelerate the server).

Syntax

```
#(config) profile bwgain
    Sets your system profile to bandwidth gain.
#(config) profile normal
    Sets your system profile to normal.
#(config) profile portal
    Sets your system profile to portal.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config) profile normal ok
```

#(config) proxy-services

Synopsis

Manages the proxy services on the SG appliance.

Syntax

```
#(config) proxy-services
This changes the prompt to:
    #(config proxy-services)
```

Subcommands

Note: Additional information is found under options that are hyperlinked (blue).

```
#(config proxy-services) create service_type service_name
   Creates a proxy service of the type and name that you specify. For more information on creating specific
   proxy services, see Available Service Types on page 220.
#(config proxy-services) delete service name
   Deletes the specified proxy service.
#(config proxy-services) dynamic-bypass
   Changes the prompt to # (config dynamic-bypass) on page 222 to allow you to manage
   dynamic-bypass settings.
#(config proxy-services) edit service_name
   Allows you to edit a proxy service of the specified name. For more information on editing specific proxy
   services, see Available Service Types on page 220.
#(config proxy-services) exit
   Returns to the #(config) prompt.
#(config proxy-services) static-bypass
   Changes the prompt to # (config static-bypass) on page 224 to allow you to manage
   static-bypass settings.
#(config proxy-services) view {dynamic-bypass | services | static-bypass}
   Allows you to view proxy service parameters.
```

Available Service Types

You can create proxy services using the following service types:

Note: The service types listed below are not necessarily the service names you use. The syntax for creating a service type is #(config proxy-services) create <code>service_type</code> is one of those listed below and <code>service_name</code> is of your choosing.

```
    :#(config aol-im) on page 225
    #(config cifs) on page 226
    #(config dns) on page 227
    #(config endpoint-mapper) on page 228
    #(config ftp) on page 229
```

```
#(config http) on page 230
#(config https-reverse-proxy) on page 232
#(config mms) on page 234
#(config msn-im) on page 235
#(config rtsp) on page 236
#(config socks) on page 237
#(config ssl) on page 238
#(config tcp-tunnel) on page 239
#(config telnet) on page 241
#(config yahoo-im) on page 242
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
#(config proxy-services) create tcp-tunnel tcp tunnel 2
#(config proxy-services) edit tcp_tunnel_2
#(config tcp_tunnel_2)?
add
                             Add a listener
attribute
                             Configure service attributes
bypass
                             Change a particular listener's action to bypass
                             Return to (config proxy-services) prompt
exit
                             Change a particular listener's action to intercept
intercept
                             Remove a listener
remove
                             Show proxy service configuration
view
```

#(config dynamic-bypass)

Synopsis

Dynamic bypass provides a maintenance-free method for improving performance of the SG appliance by automatically compiling a list of requested URLs that return various kinds of errors.

Syntax

```
#(config) proxy-services
#(config proxy-services) dynamic-bypass
The prompt changes to:
#(config dynamic-bypass)
```

Subcommands

```
#(config dynamic-bypass) clear
   Clears all dynamic bypass entries.

#(config dynamic-bypass) disable
   Disables dynamic bypass.

#(config dynamic-bypass) enable
   Enables dynamic bypass.

#(config dynamic-bypass) exit
   Exits to the #(config proxy-services) prompt.

#(config dynamic-bypass) max-entries number_of_entries
   Specifies the maximum number of dynamic-bypass entries. Connections that match entries in the dynamic bypass list are not intercepted by the application proxies. Entries in the dynamic bypass list eventually time out based on the configuration. If the list grows beyond its configured size, the oldest entry is removed
```

<pre>#(config dynamic-bypass) no trigger {all</pre>	connect-error non-http
receive-error 400 403 405 406	5 500 502 503 504}
Disables dynamic bypass for the specified HTTP r	response code, all HTTP response codes, or all
non-HTTP responses. Values are specified below.	

Event Value	Description
all	Enables all dynamic bypass triggers.
non-http	Enables dynamic bypass for non-HTTP responses.
connect-error	Enables dynamic bypass for any connection failure to the origin content server, including timeouts.
receive-error	Enables dynamic bypass for when a TCP connection to an origin content server succeeds, but the cache does not receive an HTTP response.
400	Enables dynamic bypass for HTTP 400 responses.
401	Enables dynamic bypass for HTTP 401 responses.
403	Enables dynamic bypass for HTTP 403 responses.
405	Enables dynamic bypass for HTTP 405 responses.
406	Enables dynamic bypass for HTTP 406 responses.

Event Value	Description
500	Enables dynamic bypass for HTTP 500 responses.
502	Enables dynamic bypass for HTTP 502 responses.
503	Enables dynamic bypass for HTTP 503 responses.
504	Enables dynamic bypass for HTTP 504 responses.

#(config dynamic-bypass) server-threshold number_of_entries

Specifies the number of client entries for all clients to bypass a server. Each dynamic entry can be identified by a server address or client/server address pair. A dynamic entry without a client address means the client address is a wildcard address. For example, if the server threshold is set to 10 and there are already nine dynamic entries with different client addresses for the same server address, the next time a new dynamic entry is added to the same server address but contains a different client address, the SG appliance compresses the nine dynamic entries into one dynamic entry with server address only; all clients going to that server address are bypassed.

```
#(config dynamic-bypass) timeout minutes
Sets the dynamic-bypass timeout interval in minutes.
```

```
#(config dynamic-bypass) trigger {all | connect-error | non-http | receive-error | 400 | 403 | 405 | 406 | 500 | 502 | 503 | 504}
Enables dynamic bypass for the specified HTTP response code, all HTTP response codes, or all non-HTTP responses.
```

```
#(config dynamic-bypass) view {configuration | filter {* | all |
    client_ip_address | client_ip_address/subnet-mask} {* | all |
    server_ip_address | server_ip_address/subnet-mask}} | <Enter>}
Allows you to view the dynamic-bypass configuration or to filter the dynamic-bypass list on the
    parameters above.
```

For More Information

- □ Volume 3: Proxies and Proxy Services
- Volume 11: Content Policy Language Guide

#(config static-bypass)

Synopsis

Static bypass prevents the SG appliance from transparently accelerating requests to servers that perform IP authentication with clients. When a request matches an IP address and subnet mask specification, the request is sent to the designated gateway without going through the SG appliance.

Syntax

```
#(config) proxy-services
#(config proxy-services) static-bypass
#(config static-bypass)
```

Subcommands

```
#(config static-bypass) add {all | client_ip_address | client_ip_address/
    subnet-mask} {all | server_ip_address | server_ip_address/subnet-mask}
    Allows you to add a listener with the parameters you specify

#(config static-bypass) exit
    Exits from the #(config static-bypass) mode and returns to the #(config proxy-services)
    mode.

#(config static-bypass) remove {all | client_ip_address | client_ip_address/
    subnet-mask} {all {server_ip_address | server_ip_address/subnet-mask}}
    Allows you to remove a listener.

#(config static-bypass) view {filter {* | all | client_ip_address | client_ip_address | client_ip_address/ subnet-mask} } {* | all | server_ip_address | server_ip_address | server_ip_address/ subnet-mask}} } | <Enter>}
    Allows you to view static bypass entries based on the filters you specify.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) static-bypass
SGOS #(config static-bypass) add 10.9.17.135 all
ok
```

#(config) proxy-services #(config aol-im)

#(config aol-im)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service name) add all {ip address | ip address/subnet-mask} {port |
   first port-last port} [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service name) attribute reflect-client-ip {disable | enable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service_name) bypass {all | ip_address | ip_address/subnet-mask} {port |
   first port-last port}
   Changes the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the #(config proxy-services) prompt.
#(config service_name) intercept {all | ip_address | ip_address/subnet-mask} {port
    | first port-last port}
   Changes the behavior from bypass to intercept for the listener you specify.
#(config service_name) remove {all | ip_address | ip_address/subnet-mask} {port |
   first_port-last_port}
   Allows you to remove a listener.
#(config service_name) view
   Views the specified proxy service.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create aol-im aol1
SGOS#(config proxy-services) edit aol1
SGOS #(config aol1) attribute reflect-client-ip enable
ok
```

#(config) proxy-services #(config cifs)

#(config cifs)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service_name) add {transparent | ip_address | ip_address/subnet-mask}
   {port | first port-last port} [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service_name) attribute adn-optimize {disable | enable}
   Controls whether to optimize bandwidth usage when connecting upstream using an ADN tunnel.
#(config service name)) attribute reflect-client-ip {disable | enable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service_name) attribute use-adn {disable | enable}
   Controls whether ADN is enabled for a specific service. Enabling ADN does not guarantee the
   connections are accelerated by ADN. The actual enable decision is determined by ADN routing (for
   explicit deployment) and network setup (for transparent deployment).
#(config service_name) bypass {transparent | ip_address | ip_address/subnet-mask}
    {port | first port-last port}
   Change the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the #(config proxy-services) prompt.
#(config service name) intercept {transparent | ip address |
   ip address/subnet-mask { port | first port-last port }
   Change the behavior from bypass to intercept for the listener you specify.
#(config service_name) remove {transparent | ip_address | ip_address/subnet-mask}
    {port | first port-last port}
   Allows you to remove a listener.
#(config service_name) view
   Views the specified proxy service.
```

For More Information

Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create cifs cifs1
SGOS#(config proxy-services) edit cifs1
SGOS #(config cifs1) attribute adn-optimize enable
ok
```

#(config) proxy-services #(config dns)

#(config dns)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service name) add {transparent | explicit | all | ip address |
   ip address/subnet-mask\ {port | first port-last port\ [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service name) attribute reflect-client-ip {disable | enable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service_name) bypass {transparent | explicit | all | ip_address |
   ip address/subnet-mask { first port-last port }
   Change the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the # (config proxy-services) prompt.
#(config service_name) intercept {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Change the behavior from bypass to intercept for the listener you specify.
#(config service_name) remove {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Allows you to remove a listener.
#(config service_name) view
   Views the specified proxy service.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create dns dns1
SGOS#(config proxy-services) edit dns1
SGOS #(config dns1) attribute reflect-client-ip enable
ok
```

#(config endpoint-mapper)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config proxy-services service_name) add {all | ip_address |
   ip address/subnet-mask { port | first port-last port } [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service_name) attribute adn-optimize {disable | enable}
   Controls whether to optimize bandwidth usage when connecting upstream using an ADN tunnel.
#(config service name) attribute reflect-client-ip {disable | enable}}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service_name) attribute use-adn {disable | enable}
   Controls whether ADN is enabled for a specific service. Enabling ADN does not guarantee the
   connections are accelerated by ADN. The actual enable decision is determined by ADN routing (for
   explicit deployment) and network setup (for transparent deployment).
#(config service_name) bypass{all | ip_address | ip_address/subnet-mask} {port |
   first port-last port}
   Change the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the #(config proxy-services) prompt.
#(config service_name) intercept {all | ip_address | ip_address/subnet-mask}
   {port | first port-last port}
   Change the behavior from bypass to intercept for the listener you specify.
#(config service_name) remove {all | ip_address | ip_address/subnet-mask} {port |
   first port-last port}
   Allows you to remove a listener.
#(config service_name) view
   Views the specified proxy service.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create endpoint-mapper epmapper1
SGOS#(config proxy-services) edit epmapper1
SGOS#(config epmapper1) add all 10003
ok
```

#(config) proxy-services #(config ftp)

#(config ftp)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service_name) add {all | ip_address | ip_address/subnet-mask} {port |
   first port-last port} [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service_name) attribute reflect-client-ip {enable | disable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service name) attribute adn-optimize {disable | enable}
   Controls whether to optimize bandwidth usage when connecting upstream using an ADN tunnel.
#(config service_name) attribute use-adn {disable | enable}
   Controls whether ADN is enabled for a specific service. Enabling ADN does not guarantee the
   connections are accelerated by ADN. The actual enable decision is determined by ADN routing (for
   explicit deployment) and network setup (for transparent deployment).
#(config service_name) bypass{all | ip_address | ip_address/subnet-mask} {port |
   first port-last port}
   Change the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the #(config proxy-services) prompt.
#(config service_name) intercept {all | ip_address | ip_address/subnet-mask}
   {port | first port-last port}
   Change the behavior from bypass to intercept for the listener you specify.
#(config service_name) remove {all | ip_address | ip_address/subnet-mask} {port |
   first port-last port}
   Allows you to remove a listener.
#(config service_name) view
   Views the specified proxy service.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create ftp ftp1
SGOS#(config proxy-services) edit ftp1
SGOS #(config ftp1) intercept all 10004
ok
```

#(config) proxy-services #(config http)

#(config http)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

```
Syntax
```

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service_name) add {transparent | explicit | all | ip_address |
    ip address/subnet-mask { port | first port-last port } [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service_name) attribute adn-optimize {disable | enable}
   Controls whether to optimize bandwidth usage when connecting upstream using an ADN tunnel.
#(config service name) attribute authenticate-401 {disable | enable}
    All transparent and explicit requests received on the port always use transparent authentication (cookie
   or IP, depending on the configuration). This is especially useful to force transparent proxy authentication
   in some proxy-chaining scenarios.
#(config service name) attribute connect (disable | enable}
   This command is deprecated. Policy should be used instead. For example:
    ; To block CONNECT destined to ports other then 443
    <Proxy>
     url.port=!443 http.method=CONNECT deny
#(config service name) attribute detect-protocol {disable | enable}
   Protocols that can be detected include: HTTP, P2P (eDonkey, BitTorrent, FastTrack, Gnutella), SSL, and
   Endpoint Mapper.
#(config service_name) attribute head (disable | enable}
   This command is deprecated. Policy should be used instead. For example:
    ; To block HEAD methods
    <Proxy>
     http.method=HEAD deny
#(config service name) attribute reflect-client-ip {disable | enable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service_name) attribute use-adn {disable | enable}
   Controls whether ADN is enabled for a specific service. Enabling ADN does not guarantee the
   connections are accelerated by ADN. The actual enable decision is determined by ADN routing (for
   explicit deployment) and network setup (for transparent deployment).
#(config service_name) bypass {transparent | explicit | all | ip_address |
    ip address/subnet-mask { first port-last port }
   Change the behavior from intercept to bypass for the listener you specify.
#(config service_name) exit
   Exits to the #(config proxy-services) prompt.
```

#(config) proxy-services #(config http)

```
#(config service_name) intercept {transparent | explicit | all | ip_address |
    ip_address/subnet-mask} {port | first_port-last_port}
    Change the behavior from bypass to intercept for the listener you specify.

#(config service_name) remove {transparent | explicit | all | ip_address |
    ip_address/subnet-mask} {port | first_port-last_port}
    Allows you to remove a listener.

#(config service_name) view
    Views the specified proxy service.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create http http2
SGOS#(config proxy-services) edit http2
SGOS#(config http2) attribute authenticate-401 enable
ok
```

#(config https-reverse-proxy)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

```
Syntax
```

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service_name) add {transparent | explicit | all | ip_address |
   ip address/subnet-mask { port | first port-last port } [intercept | bypass]
   Allows you to add a listener with the parameters specified.
#(config service_name) attribute adn-optimize {disable | enable}
   Controls whether to optimize bandwidth usage when connecting upstream using an ADN tunnel.
#(config service name) attribute ccl list name
   CA Certificate List used for verifying client certificates.
#(config service name) attribute cipher-suite cipher-suite+
   Allows you to specify the cipher suites you want to use with the https-reverse-proxy service.
#(config service name) attribute forward-client-cert {disable | enable}
   When used with the verify-client attribute, puts the extracted client certificate information
   into a header that is included in the request when it is forwarded to the OCS. The name of the
   header is Client-Cert. The header contains the certificate serial number, subject, validity dates
   and issuer (all as name=value pairs). The actual certificate is not forwarded.
#(config service name) attribute keyring keyring-ID
   Allows you to specify the keyring you want to use with this service.
#(config service_name) attribute reflect-client-ip {disable | enable}}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service name) attribute use-adn {disable | enable}
   Controls whether ADN is enabled for a specific service. Enabling ADN does not guarantee the
   connections are accelerated by ADN. The actual enable decision is determined by ADN routing (for
   explicit deployment) and network setup (for transparent deployment).
#(config service_name) attribute ssl-versions {sslv2 |sslv3 | tlsv1 | sslv2v3 |
   sslv2tlsv1 | sslv3tlsv1 |sslv2v3tlsv1}
   Allows you to select which versions of SSL you want to support. The default is to support SSL v2 and v3
   and enable TLS.
#(config service_name) attribute verify-client {disable | enable}
   Requests and validates the SSL client certificate.
#(config service_name) bypass {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Changes the behavior from intercept to bypass for the listener specified.
#(config service_name) exit
   Exits to the #(config proxy-services) prompt.
```

```
#(config service_name) intercept {transparent | explicit | all | ip_address |
    ip_address/subnet-mask} {port | first_port-last_port}
    Change the behavior from bypass to intercept for the listener you specify.

#(config service_name) remove {transparent | explicit | all | ip_address |
    ip_address/subnet-mask} {port | first_port-last_port}
    Allows you to remove a listener.

#(config service_name) view
    Views the specified proxy service.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create https-reverse-proxy HTTPS_RP1 SGOS#(config proxy-services) edit HTTPS_RP1 SGOS#(config HTTPS_RP1) attribute reflect-client-ip enable ok
```

#(config) proxy-services #(config mms)

#(config mms)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service_name) add {transparent | explicit | all | ip_address |
   ip address/subnet-mask { port | first port-last port } [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service_name) attribute reflect-client-ip {disable | enable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service name) bypass {transparent | explicit | all | ip address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Change the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the # (config proxy-services) prompt.
#(config service_name) intercept {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Change the behavior from bypass to intercept for the listener you specify.
#(config service_name) remove {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Allows you to remove a listener.
#(config service name) view
   Views the specified proxy service.
```

For More Information

■ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create mms mms1
SGOS#(config proxy-services) edit mms1
SGOS#(config mms1) attribute reflect-client-ip enable ok
```

#(config) proxy-services #(config msn-im)

#(config msn-im)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service_name) add {all | ip_address | ip_address/subnet-mask} {port |
    first port-last port | [intercept | bypass]
    Allows you to add a listener with the parameters you specify.
#(config service_name) attribute reflect-client-ip {disable | enable}
    Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service_name) bypass{all | ip_address | ip_address/subnet-mask} {port |
    first port-last port}
   Changes the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
    Exits to the #(config proxy-services) prompt.
#(config service_name) intercept {all | ip_address | ip_address/subnet-mask} {port
    | first port-last port}
   Changes the behavior from bypass to intercept for the listener you specify.
\# (\texttt{config} \ \textit{service\_name}) \ \textbf{remove} \ \{ \textbf{all} \ | \ \textit{ip\_address} \ | \ \textit{ip\_address/subnet-mask} \} \ \{ \textit{port} \ | \ \} 
    first port-last port}
    Allows you to remove a listener.
#(config service name) view
    Views the specified proxy service.
```

For More Information

■ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create msn-im msn1
SGOS#(config proxy-services) edit msn1
SGOS#(config msn1) attribute reflect-client-ip enable ok
```

#(config) proxy-services #(config rtsp)

#(config rtsp)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
    #(config service_name)
```

Subcommands

```
#(config service_name) add {transparent | explicit | all | ip_address |
   ip address/subnet-mask { port | first port-last port } [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service_name) attribute reflect-client-ip {disable | enable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service name) bypass {transparent | explicit | all | ip address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Change the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the #(config proxy-services) prompt.
#(config service_name) intercept {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Change the behavior from bypass to intercept for the listener you specify.
#(config service_name) remove {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Allows you to remove a listener.
#(config service name) view
   Views the specified proxy service.
```

For More Information

■ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create rtsp rtsp1
SGOS#(config proxy-services) edit rtsp1
SGOS#(config rtsp1) attribute reflect-client-ip enable ok
```

#(config) proxy-services #(config socks)

#(config socks)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service_name) add {explicit | ip_address | ip_address/subnet-mask} {port
    | first port-last port | [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service_name) attribute adn-optimize {disable | enable}
   Controls whether to optimize bandwidth usage when connecting upstream using an ADN tunnel.
#(config service name) attribute detect-protocol {disable | enable}
   Detects the protocol being used. Protocols that can be detected include: HTTP, P2P (eDonkey, BitTorrent,
   FastTrack, Gnutella), SSL, and Endpoint Mapper.
#(config service name) attribute use-adn {disable | enable}
   Controls whether ADN is enabled for a specific service. Enabling ADN does not guarantee the
   connections are accelerated by ADN. The actual enable decision is determined by ADN routing (for
   explicit deployment) and network setup (for transparent deployment).
#(config service_name) bypass{explicit | ip_address | ip_address/subnet-mask}
    {port | first port-last port}
   Change the behavior from intercept to bypass for the listener you specify.
#(config service_name) exit
   Exits to the #(config proxy-services) prompt.
#(config service_name) intercept {explicit | ip_address | ip_address/subnet-mask}
    {port | first_port-last_port}
   Change the behavior from bypass to intercept for the listener you specify.
#(config service name) remove {explicit | ip address | ip address/subnet-mask}
    {port | first_port-last_port}
   Allows you to remove a listener.
#(config service name) view
   Views the specified proxy service.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create socks socks1
SGOS#(config proxy-services) edit socks1
SGOS#(config socks1) attribute adn-optimize enable ok
```

#(config) proxy-services #(config ssl)

#(config ssl)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service_name) add {transparent | ip_address | ip_address/subnet-mask}
    {port | first port-last port} [intercept | bypass]
    Allows you to add a listener with the parameters you specify.
#(config service_name) attribute adn-optimize {disable | enable}
   Controls whether to optimize bandwidth usage when connecting upstream using an ADN tunnel.
#(config service name) attribute reflect-client-ip {disable | enable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service_name) attribute use-adn {disable | enable}
   Controls whether ADN is enabled for a specific service. Enabling ADN does not guarantee the
   connections are accelerated by ADN. The actual enable decision is determined by ADN routing (for
   explicit deployment) and network setup (for transparent deployment).
#(config service_name) bypass{transparent | ip_address | ip_address/subnet-mask}
    {port | first_port-last_port}
   Change the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the #(config proxy-services) prompt.
#(config service name) intercept {transparent | ip address |
    ip_address/subnet-mask} {port | first_port-last_port}
   Change the behavior from bypass to intercept for the listener you specify.
#(config service_name) remove {transparent | ip_address | ip_address/subnet-mask}
    {port | first port-last port}
   Allows you to remove a listener.
#(config service_name) view
   Views the specified proxy service.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create ssl ssl1
SGOS#(config proxy-services) edit ssl1
SGOS#(config ssl1) add transparent 443
```

#(config tcp-tunnel)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
#(config service_name)
```

Subcommands

```
#(config service_name) add {transparent | explicit | all | ip_address |
   ip address/subnet-mask { port | first port-last port } [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service_name) attribute adn-optimize {disable | enable}
   Controls whether to optimize bandwidth usage when connecting upstream using an ADN tunnel.
#(config service name) attribute detect-protocol {disable | enable}
   Detects the protocol being used. Protocols that can be detected include: HTTP, P2P (eDonkey, BitTorrent,
   FastTrack, Gnutella), SSL, and Endpoint Mapper.
#(config service name) attribute early-intercept {disable | enable}
   Controls whether the proxy responds to client TCP connection requests before connecting to the
   upstream server. When early intercept is disabled, the proxy delays responding to the client until after it
   has attempted to contact the server.
#(config service_name) attribute reflect-client-ip {disable | enable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service_name) attribute use-adn {disable | enable}
   Controls whether ADN is enabled for a specific service. Enabling ADN does not guarantee the
   connections are accelerated by ADN. The actual enable decision is determined by ADN routing (for
   explicit deployment) and network setup (for transparent deployment).
#(config service_name) bypass {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Change the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the #(config proxy-services) prompt.
#(config service_name) intercept {transparent | explicit | all | ip_address |
   ip_address/subnet-mask { port | first_port-last_port }
   Change the behavior from bypass to intercept for the listener you specify.
#(config service name) remove {transparent | explicit | all | ip address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Allows you to remove a listener.
#(config service name) view
```

For More Information

□ Volume 3: Proxies and Proxy Services

Views the specified proxy service.

Example

 $\begin{tabular}{ll} SGOS\#(config proxy-services) & create tcp-tunnel TCP1 \\ SGOS\#(config proxy-services) & edit TCP1 \\ SGOS\#(config TCP1) & attribute & early-intercept & enable \\ ok \\ \end{tabular}$

#(config) proxy-services #(config telnet)

#(config telnet)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to
#(config service_name)
```

Subcommands

```
#(config service_name) add {transparent | explicit | all | ip_address |
   ip address/subnet-mask { port | first port-last port } [intercept | bypass]
   Allows you to add a listener with the parameters you specify.
#(config service_name) attribute reflect-client-ip {disable | enable}
   Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service name) bypass {transparent | explicit | all | ip address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Change the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
   Exits to the # (config proxy-services) prompt.
#(config service_name) intercept {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Change the behavior from bypass to intercept for the listener you specify.
#(config service_name) remove {transparent | explicit | all | ip_address |
   ip_address/subnet-mask} {port | first_port-last_port}
   Allows you to remove a listener.
#(config service name) view
   Views the specified proxy service.
```

For More Information

■ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create telnet telnet1
SGOS#(config proxy-services) edit telnet1
SGOS #(config telnet1) view
Service Name: telnet1
Proxy: Telnet
Attributes: early-intercept
Destination IP Port Range Action
```

#(config) proxy-services #(config yahoo-im)

#(config yahoo-im)

Synopsis

Enters the subcommand mode to allow you to manage a specific proxy service.

Syntax

```
#(config proxy-services) create service_type service_name
#(config proxy-services) edit service_name
This changes the prompt to:
    #(config service_name)
```

Subcommands

```
#(config service_name) add {all | ip_address | ip_address/subnet-mask} {port |
    first port-last port} [intercept | bypass]
    Allows you to add a listener with the parameters you specify.
#(config service_name) attribute reflect-client-ip {disable | enable}
    Enables or disables sending of client's IP address instead of the SG's IP address.
#(config service_name) bypass{all | ip_address | ip_address/subnet-mask} {port |
    first port-last port}
    Changes the behavior from intercept to bypass for the listener you specify.
#(config service name) exit
    Exits to the # (config proxy-services) prompt.
#(config service_name) intercept {all | ip_address | ip_address/subnet-mask} {port
    | first port-last port}
   Changes the behavior from bypass to intercept for the listener you specify.
\# (\texttt{config} \ \textit{service\_name}) \ \textbf{remove} \ \{ \textbf{all} \ | \ \textit{ip\_address} \ | \ \textit{ip\_address/subnet-mask} \} \ \{ \textit{port} \ | \ \} 
    first port-last port}
   Allows you to remove a listener.
#(config service name) view
    Views the specified proxy service.
```

For More Information

■ Volume 3: Proxies and Proxy Services

```
SGOS#(config proxy-services) create yahoo-im yahoo1
SGOS#(config proxy-services) edit yahoo1
SGOS#(config yahoo1) attribute reflect-client-ip enable ok
```

#(config) restart #(config) restart

#(config) restart

Synopsis

Use this command to set restart options for the SG appliance.

Syntax

```
#(config) restart core-image {context | full | keep number | none}
    context: Indicates only core image context should be written on restart.
    full: Indicates full core image should be written on restart.
    keep numbers: Specifies a number of core images to keep on restart.
    none: Indicates no core image should be written on restart.
#(config) restart mode {hardware | software}
    hardware: Specifies a hardware restart.
    software: Specifies a software restart.
```

For More Information

Volume 10: Managing the Blue Coat SG Appliance

```
SGOS#(config) restart mode software ok
```

#(config) return-to-sender

Synopsis

The return-to-sender feature eliminates unnecessary network traffic when the three following conditions are met:

- The SG appliance has connections to clients or servers on a different subnet.
- ☐ The shortest route to the clients or servers is not through the default gateway.
- There are no static routes or RIP routes defined that apply to the IP addresses of the clients and servers.

Under these conditions, if the return-to-sender feature is enabled, the SG appliance remembers the MAC address of the last hop for a packet from the client or server and sends any responses or requests to the MAC address instead of the default gateway.

Under the same conditions, if return-to-sender is disabled, the SG appliance sends requests or responses to the default gateway, which then sends the packets to the gateway representing the last hop to the SG appliance for the associated connection. This effectively doubles the number of packets transmitted on the LAN compared to when return-to-sender is enabled.

Inbound return-to-sender affects connections initiated to the SG appliance by clients. Outbound return-to-sender affects connections initiated by the SG appliance to origin servers.

Note: Return-to-sender functionality should only be used if static routes cannot be defined for the clients and servers or if routing information for the clients and servers is not available through RIP packets.

With return-to-sender, you can use load balancing. By default, all traffic flows out of one card. If return-to-sender is enabled, traffic is returned on the card it originally came from.

Syntax

```
#(config) return-to-sender inbound {disable | enable}
    Enables or disables return-to-sender for inbound sessions.
#(config) return-to-sender outbound {disable | enable}
    Enables or disables return-to-sender for outbound sessions.
#(config) return-to-sender version {1 | 2}
    Enables return-to-sender (RTS) versions 1 or 2.
```

In version 1, the RTS route is created at Layer-3 and stored globally, thus being interface agnostic. RTS version 2 was introduced to get around this multi-interface limitation. With version 2, TCP now stores a per-socket RTS route that contains both the destination MAC address and interface information. After the SYN is received by the SG appliance, all subsequent packets on that socket traverses the interface on which the SYN was received.

Note: All current sockets tied to that interface will time out. However, subsequent and existing TCP connections continue to function normally on the other interfaces.

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) return-to-sender inbound enable ok
```

#(config) reveal-advanced

 \square # reveal-advanced on page 70.

#(config) rip #(config) rip

#(config) rip

Synopsis

Use this command to set RIP (Routing Information Protocol) configuration options.

Using RIP, a host and router can send a routing table list of all other known hosts to its closest neighbor host every 30 seconds. The neighbor host passes this information on to its next closest neighbor and so on until all hosts have perfect knowledge of each other. (RIP uses the hop count measurement to derive network distance.) Each host in the network can then use the routing table information to determine the most efficient route for a packet.

The RIP configuration is defined in a configuration file. To configure RIP, first create a text file of RIP commands and then load the file by using the load command.

Syntax

```
#(config) rip disable
   Disables the current RIP configuration.

#(config) rip enable
   Enables the current RIP configuration.

#(config) rip no path
   Clears the current RIP configuration path as determined using the rip path url command.

#(config) rip path url
   Sets the path to the RIP configuration file to the URL indicated by url.
```

For More Information

Volume 6: Advanced Networking

```
SGOS#(config) rip path 10.25.36.47/files/rip.txt ok
```

#(config) security #(config) security

#(config) security

The #(config) security command is used for security, authentication, and authorization. The security command, by itself, cannot be used. You must use security commands with the options discussed in Subcommands below.

Synopsis

The SG appliance provides the ability to authenticate and authorize explicit and transparent proxy users using industry-standard authentication services.

Syntax

```
#(config) security [subcommands]
```

Subcommands

Modes in the security command are divided into three categories:

- Console Access and Authorization
- Realms
- Transparent Proxy

Note: While the commands are listed in functional order below, they are discussed in alphabetical order in the pages that follow. Each of the options in blue are hyperlinked so you can go directly to the command.

Console Access and Authorization

The options in this category do not enter a new submode. These options allow you to manage passwords and usernames for the SG appliance itself.

```
#(config security allowed-access) on page 250
   Adds or removes the specified IP address to the access control list.
#(config security default-authenticate-mode) on page 258
   Sets the default authenticate. mode to auto or to sg2.
#(config security destroy-old-password) on page 259
   Destroys recoverable passwords in configuration used by previous versions.
#(config security enable-password and hashed-enable-password) on page
   Sets the console enable password to the password specified.
#(config security enforce-acl) on page 261
   Enables or disables the console access control list.
#(config security flush-credentials) on page 262
   Disables/enables the flushing of the credential cache when policy is compiled.
#(config security front-panel-pin and hashed-front-panel-pin) on page
   Sets a four-digit PIN to restrict access to the front panel of the SG appliance.
#(config security management) on page 274
   Manages display settings.
```

#(config) security #(config) security

```
#(config) security password and hashed_password on page 275
   Specifies the console enable password in hashed format.
#(config) security password-display on page 276
   Specifies format to display passwords in show config output.
#(config) security username on page 292
   Specifies the console username.
```

Realms

Multiple authentication realms can be used on a single SG appliance. Multiple realms are essential if the enterprise is a managed provider or the company has merged with or acquired another company. Even for companies using only one protocol, multiple realms might be necessary, such as the case of a company using an LDAP server with multiple authentication boundaries. You can use realm sequencing to search the multiple realms all at one time.

Note: Up to 40 realms per type (such as certificate, authentication forms, and RADIUS) are allowed.

```
#(config security authentication-forms) on page 251
   Creates forms for authentication and manage them.
#(config security certificate) on page 253
   Creates and manages certificate realms.
#(config security coreid) on page 255
   Creates and manages COREid realms.
#(config security iwa) on page 264
   Creates and manages IWA realms.
#(config security ldap) on page 266
   Creates and manages LDAP realms.
#(config) security local on page 270
   Creates and manages local realms.
#(config security local-user-list) on page 272
   Creates and manages local user lists.
#(config security policy-substitution) on page 277
   Creates and manage policy-substitution realms.
#(config security radius) on page 279
   Creates and manages RADIUS realms.
#(config security request-storage) on page 282
   Creates and manages request-storage realms.
#(config security sequence) on page 283
   Creates and manages sequence realms.
#(config security siteminder) on page 285
   Creates and manages SiteMinder realms.
#(config windows-sso) on page 289
   Creates and manages Windows SSO realms.
```

Transparent Proxy

The transparent proxy authentication commands allows you

#(config) security #(config) security

#(config) security transparent-proxy-auth on page 291

Specifies certain transparent proxy authentication settings.

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) show security
Account:
   Username:
                    "admin"
  Hashed Password: $1$a2zTlEE$1b88R3SXUTXS.zO7lh8db0
   Hashed Enable Password: $1$xQnqGerX$LU65b20trsIAF6yJox26L.
   Hashed Front Panel PIN: "$1$ThSEiB1v$seyBhSxtTXEtUGDZ5NOB1/"
  Management console display realm name: "Aurora"
  Management console auto-logout timeout: Never
Access control is disabled
Access control list (source, mask):
Flush credentials on policy update is enabled
Default authenticate.mode: auto
Transparent proxy authentication:
 Method: cookie
 Cookie type: session
 Cookie virtual-url: "www.cfauth.com/"
 IP time-to-live: 15
Local realm:
 No local realm is defined.
RADIUS realm:
 No RADIUS realm is defined.
LDAP realm(s):
 No LDAP realm is defined.
IWA realm(s):
 No IWA realm is defined.
Certificate realm(s):
 No certificate realms are defined.
SiteMinder realm(s):
 No realms defined.
COREid realm(s):
 No realms defined.
Policy-substitution realm(s):
 No realms defined.
Realm sequence(s):
 No realm sequences defined.
```

#(config security allowed-access)

Synopsis

Adds or removes IP addresses to the console access control list.

Syntax

```
#(config) security allowed-access [subcommands]
```

Subcommands

```
\#(config) security allowed-access add source\_ip [ip\_mask] Adds the specified IP address to the access control list.
```

#(config) security allowed-access remove source_ip [ip_mask] Removes the specified IP from the access control list.

For More Information

- □ #(config security enforce-acl) on page 261
- □ Volume 2: Getting Started

```
#(config) security allowed-access add 10.25.36.47
```

#(config security authentication-forms)

You can use forms-based authentication exceptions to control what your users see during authentication, link.

To create and put into use forms-based authentication, you must complete the following steps:

- Create a new form or edit one of the existing authentication form exceptions
- Set storage options
- Set policies

Synopsis

Allows you to create and manage authentication forms.

Syntax

```
#(config) security authentication-forms [subcommands]
```

Subcommands

```
#(config) security authentication-forms copy [source form name
   target form name
   Changes the name of a form. Note that you cannot change the form type.
#(config) security authentication-forms create {authentication-form |
   new-pin-form | query-form | form_name
   Creates a new authentication form using the form type you specify.
#(config) security authentication-forms delete form name
   Deletes an authentication form
#(config) security authentication-forms inline form_name eof_marker
   Installs an authentication form from console input.
#(config) security authentication-forms load form_name
   Downloads a new authentication form.
#(config) security authentication-forms no path [form name]
   Negates authentication-form configuration.
#(config) security authentication-forms path [form_name] path
   Specifies the path (URL or IP address) from which to load an authentication form, or the entire set of
   authentication forms.
```

For More Information

- □ #(config security request-storage) on page 282
- Volume 5: Securing the Blue Coat SG Appliance

Views the form specified or all forms.

#(config) security authentication-forms view

Example

where form_type indicates the default authentication-form, new-pin-form, or query-form and form_name is the name you give the form.

#(config security certificate)

After an SSL session has been established, the user is asked to select the certificate to send to the SG appliance. If the certificate was signed by a Certificate Signing Authority that the SG appliance trusts, including itself, then the user is considered authenticated. The username for the user is the one extracted from the certificate during authentication.

You do not need to specify an authorization realm if:

- The policy does not make any decisions based on groups
- ☐ The policy works as desired when all certificate realm-authenticated users are not in any group

Synopsis

Allows you to create and manage certificate realms.

Syntax

```
#(config) security certificate [subcommands]
```

Subcommands

```
#(config) security certificate create-realm realm_name Creates the specified certificate realm.
```

```
#(config) security certificate delete-realm realm_name Deletes the specified certificate realm.
```

```
#(config) security certificate edit-realm realm_name Changes the prompt. See Submodes for details.
```

```
#(config) security certificate view [realm_name]

Displays the configuration of all certificate realms or just the configuration for realm_name if specified.
```

Submodes

```
#(config) security certificate edit-realm realm_name
```

This changes the prompt to:

```
#(config certificate_realm)
```

Commands in this submode:

```
#(config certificate certificate_realm) authorization append-base-dn {disable |
    dn dn_to_append | enable}
```

Disables or enables appending of the base DN to the authenticated username, or specifies the base DN to append. If no base DN is specified, then the first base DN in the LDAP authorization realm is used. Applies to LDAP authorization realms only

```
 \# (\texttt{config certificate} \ \textit{certificate} \_ \textit{realm}) \ \ \textbf{authorization container-attr-list} \\ list\_of\_attribute\_names
```

Specifies the attributes from the certificate subject to use in constructing the user DN. E.g. "o, ou". The list needs to be quoted if it contains spaces.

```
#(config certificate certificate_realm) authorization no {container-attr-list |
    realm-name}
```

Clears the container attribute list or the authorization realm.

```
#(config certificate certificate realm) authorization realm-name
   authorization_realm_name
   Specifies the authorization realm to use. Only LDAP and local realms are valid authorization realms.
#(config certificate certificate_realm) authorization username-attribute
   username_attribute
   Specifies the attribute in the certificate subject that identifies the user's relative name. The default is "cn".
#(config certificate certificate realm) cache-duration seconds
   Specifies the length of time to cache credentials for this realm.
#(config certificate certificate_realm) display-name display_name
   Specifies the display name for this realm.
#(config certificate certificate_realm) exit
   Exits #(config certificate_realm) mode and returns to (config) mode.
#(config certificate certificate realm) rename new realm name
   Renames this realm to new_realm_name.
#(config certificate certificate realm) view
   Displays this realm's configuration.
#(config certificate certificate realm) virtual-url url
   Specifies the virtual URL to use for this realm. If no URL is specified the global transparent proxy virtual
   URL is used.
```

For More Information

- □ #(config security ldap) on page 266
- □ #(config) security local on page 270
- □ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security certificate edit-realm testcert
#(config certificate testcert) no container-attr-list
  ok
#(config certificate testcert) cache-duration 800
  ok
#(config certificate testcert) exit
#(config)
```

#(config security coreid)

Within the COREid Access System, BCAAA acts as a custom AccessGate. It communicates with the COREid Access Servers to authenticate the user and to obtain a COREid session token, authorization actions, and group membership information.

Synopsis

Allows you to create and manage COREid realms.

Syntax

```
#(config) security coreid [subcommands]
```

Subcommands

```
#(config) security coreid create-realm realm_name
    Creates the specified COREid realm
```

```
#(config) security coreid delete-realm realm_name Deletes the specified COREid realm.
```

```
#(config) security coreid edit-realm realm_name Changes the prompt. See Submodes for details.
```

```
#(config) security coreid view [realm_name]
```

Displays the configuration of all COREid realms or just the configuration for realm_name if specified.

Submodes

```
#(config) security coreid edit-realm realm_name
```

This changes the prompt to:

```
#(config coreid realm_name)
```

Commands in this submode:

```
#(config coreid realm_name) access-server-hostname hostname
The hostname of the primary Access Server.
```

```
#(config coreid realm_name) access-server-idid
The ID of the primary Access Server.
```

```
#(config coreid realm_name) access-server-port port
The port of the primary Access Server
```

```
#(config coreid realm name) add-header-responses disable | enable
```

When enabled, authorization actions from the policy domain obtained during authentication are added to each request forwarded by the SG appliance. Note that header responses replaces any existing header of the same name; if no such header exists, the header is added. Cookie responses replace a cookie header with the same cookie name; if no such cookie header exists, one is added.

```
#(config coreid realm_name) alternate-agent accessgate-id name
The ID of the alternate AccessGate agent.
```

```
#(config coreid realm_name) alternate-agent encrypted-secret
encrypted shared secret
```

The encrypted password associated with the alternate Access Gate. (Passwords can be up to 64 characters long and are always case sensitive.) The primary use of the encrypted-secret command is to allow the SG appliance to reload a password that it encrypted. If you choose to use a third-party encryption application, be sure it supports RSA encryption, OAEP padding, and is Base64 encoded with no newlines \mid

```
#(config coreid realm name) alternate-agent host host name
   The hostname or the IP address of the alternate system that contains the agent.
#(config coreid realm name) alternate-agent port port
   The port where the alternate agent listens.
#(config coreid realm_name) alternate-agent secret shared_secret
   The password associated with the alternate AccessGate. (Passwords can be up to 64 characters long and
   are always case sensitive.)
#(config coreid realm_name) always-redirect-offbox {disable | enable}
   Forces authentication challenges to always be redirected to an off-box URL.
#(config coreid realm name) cache-duration seconds
   Specifies the length of time in seconds that user and administrator credentials received are cached.
   Credentials can be cached for up to 3932100 seconds. The default value is 900 seconds (15 minutes).
#(config coreid realm name) case-sensitive {disable | enable}
   Specifies whether the username and group comparisons on the SG appliance should be case-sensitive.
#(config coreid realm name) certificate-path certificate path
   If Cert mode is used, the location on the BCAAA host machine where the key, server and CA chain
   certificates reside. The certificate files must be named aaa_key.pem, aaa_cert.pem and aaa_chain.pem
   respectively.
#(config coreid realm name) display-name display name
    Equivalent to the display-name option in the CPL authenticate action. The default value for the display
   name is the realm name. The display name cannot be longer than 128 characters and it cannot be null.
#(config coreid realm name) encrypted-transport-pass-phrase encrypted pass phrase
   If Simple or Cert mode is used, the Transport encrypted passphrase configured in the Access System.
#(config coreid realm name) exit
   Exits the #(config coreid) edit mode and returns to #(config) mode.
#(config coreid realm_name) no alternate-agent | certificate-path
    Removes the alternate agent configuration or the certificate path.
#(config coreid realm name) primary-agent accessgate-id name
   The ID of the primary AccessGate agent.
#(config coreid realm_name) primary-agent encrypted-secret
    encrypted shared secret
   The encrypted password associated with the primary AccessGate. (Passwords can be up to 64 characters
   long and are always case sensitive.) The primary use of the encrypted-secret command is to allow the SG
   appliance to reload a password that it encrypted. If you choose to use a third-party encryption
   application, be sure it supports RSA encryption, OAEP padding, and is Base64 encoded with no newline.
#(config coreid realm name) primary-agent host host name
   The hostname or the IP address of the primary system that contains the agent.
#(config coreid realm_name) primary-agent port port
   The port where the primary agent listens.
#(config coreid realm name) primary-agent secret shared secret
   The password associated with the primary AccessGate. (Passwords can be up to 64 characters long and
   are always case sensitive.)
#(config coreid realm name) protected-resource-name resource name
   The resource name defined in the Access System policy domain
#(config coreid realm name) rename new realm name
    Renames the realm to your request.
#(config coreid realm name) security-mode {cert | open | simple}
   The Security Transport Mode for the AccessGate to use when communicating with the Access System
```

```
#(config coreid realm name) ssl {disable | enable}
   Enable or disable SSL.
#(config coreid realm name) ssl-verify-agent {disable | enable}
    Enable or disable verification of BCAAA's certificate
#(config coreid realm_name) timeout seconds
   The length of time to elapse before timeout if a response from BCAAA is not received.
#(config coreid realm name) transport-pass-phrase pass phrase
   If Simple or Cert mode is used, the Transport passphrase configured in the Access System.
#(config coreid realm name) validate-client-IP {disable | enable}
    Enables validation of the client IP address in SSO cookies. If the client IP address in the SSO cookie can
   be valid yet different from the current request client IP address due to downstream proxies or other
   devices, then disable client IP address validation. The WebGates participating in SSO with the SG
   appliance should also be modified. The WebGateStatic.lst file should be modified to either set the
   ipvalidation parameter to false or to add the downstream proxy/device to the IPValidationExceptions
   lists.
#(config coreid realm name) view
   Views the realm configuration.
#(config coreid realm name) virtual-url url
```

The URL to redirect to when the user needs to be challenged for credentials. If the SG appliance is participating in SSO, the virtual hostname must be in the same cookie domain as the other servers

For More Information

#(config security siteminder) on page 285

participating in the SSO. It cannot be an IP address or the default.

□ Volume 5: Securing the Blue Coat SG Appliance

```
SGOS#(config) security coreid edit-realm coreid_1
SGOS#(config coreid coreid_1) access-server-hostname AccessServer_1
SGOS#(config coreid coreid_1) cache-duration 800
SGOS#(config coreid coreid 1) exit
```

#(config security default-authenticate-mode)

Synopsis

Sets the default authenticate. mode to auto or to sg2.

Syntax

```
#(config) security default-authenticate-mode [auto | sg2]
```

Subcommands

```
\begin{tabular}{ll} \# ({\tt config}) & \textbf{security default-authenticate-mode auto} \\ Enables & the access control list. \end{tabular}
```

#(config) security default-authenticate-mode sg2
Disables the access control list.

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

Example

SGOS#(config) security default-authenticate-mode auto

#(config security destroy-old-password)

Synopsis

Destroys recoverable passwords in configuration used by previous versions.

Syntax

```
#(config) security destroy-old-password [force]
```

Subcommands

```
#(config) security destroy-old-password
    Destroys passwords after prompting.
#(config) security destroy-old-password force
```

Destroys passwords without prompting.

Note: Do not use this command if you intend to downgrade, as the old passwords are destroyed.

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

Example

#(config) destroy-old-password force

#(config security enable-password and hashed-enable-password)

Synopsis

Sets the console enable password to the password specified.

Syntax

```
#(config) security enable-password "password"
#(config) security hashed-enable-password hashed password
```

Subcommands

```
#(config) security enable-password "password"
```

Note that the enable password must be in quotes. This is the password required to enter enable mode from the CLI when using console credentials, the serial console, or RSA SSH.

#(config) security hashed-enable-password hashed_password

The enable password in hashed format. You can either hash the password prior to entering it, or you can allow the SG appliance to hash the password.

For More Information

□ *Volume 5: Securing the Blue Coat SG Appliance*

```
#(config) security enable-password "test"
```

#(config security enforce-acl)

Synopsis

Enables or disables the console access control list (ACL).

Syntax

```
#(config) security enforce-acl [enable | disable]
```

Subcommands

```
#(config) security enforce-acl enable
    Enables the access control list.
#(config) security enforce-acl disable
    Disables the access control list.
```

For More Information

```
□ #(config) alert on page 103
```

```
#(config) security enforce-acl disable
```

#(config security flush-credentials)

Synopsis

Disables/enables the flushing of the credential cache when policy is compiled.

Syntax

Subcommands

```
#(config) security flush-credentials on-policy-change enable
Allows the credential cache credentials to be cleared when the policy changes.
```

#(config) security flush-credentials on-policy-change disable

Prevents the credential cache credentials from being cleared when the policy changes.

#(config) security flush-credentials realm realm_name Clears the credential for a specific realm immediately.

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security flush-credentials realm radius1
```

#(config security front-panel-pin and hashed-front-panel-pin)

Synopsis

Sets a four-digit PIN to restrict access to the front panel of the SG appliance.

Syntax

```
#(config) security front-panel-pin PIN
```

Subcommands

```
#(config) security front-panel-pin PIN
Use of this command is recommended for security reasons.
```

Note: To clear the PIN, specify 0000.

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security front-panel-pin 1234
```

#(config security iwa)

#(config security iwa)

Integrated Windows Authentication (IWA) is an authentication mechanism available on Windows networks. (The name of the realm has been changed from NTLM to IWA.)

IWA is a Microsoft-proprietary authentication suite that allows Windows clients (running on Windows 2000 and higher) to automatically choose between using Kerberos and NTLM authentication challenge/response, as appropriate. When an IWA realm is used and a resource is requested by the client from the SG appliance, the appliance contacts the client's domain account to verify the client's identity and request an access token. The access token is generated by the domain controller (in case of NTLM authentication) or a Kerberos server (in the case of Kerberos authentication) and passed to (and if valid, accepted by) the SG appliance.

Refer to the Microsoft Web site for detailed information about the IWA protocol.

Synopsis

Allows you to create and manage IWA realms.

Syntax

```
#(config) security iwa [subcommands]
```

Subcommands

```
#(config) security iwa create-realm realm_name
   Creates the specified IWA realm.
#(config) security iwa delete-realm realm_name
   Deletes the specified IWA realm.
#(config) security iwa edit-realm realm name
   Changes the prompt. See Submodes for details.
#(config) security iwa view [realm_name]
   Displays the configuration of all IWA realms or just the configuration for realm name if specified.
```

Submodes

```
#(config) security IWA edit-realm realm_name
This changes the prompt to:
   #(config IWA realm name)
Commands in this submode:
   #(config IWA realm_name) alternate-server host [port]
   Specifies the alternate server host and port.
   #(config IWA realm name) cache-duration seconds
       Specifies the length of time to cache credentials for this realm.
   #(config IWA realm_name) credentials-basic {disable | enable}
       Disables/enables support for Basic credentials in this realm. At least one of Basic or NTLM/Kerberos
       credentials must be supported.
   #(config IWA realm_name) credentials-kerberos {disable | enable}
       Disables/enables support for Kerberos credentials in this realm. If Kerberos is enabled, NTLM must also
       be enabled. At least one of Basic or NTLM/Kerberos credentials must be supported.
   #(config IWA realm name) credentials-ntlm {disable | enable}
```

Disables/enables support for NTLM credentials in this realm. If NTLM is enabled, Kerberos must also be

enabled. At least one of Basic or NTLM/Kerberos credentials must be enabled.

```
#(config IWA realm name) display-name display name
   Specifies the display name for this realm.
#(config IWA realm_name) exit
   Exits the iwa edit mode and returns to (config) mode.
#(config IWA realm_name) no alternate-server
   Clears the alternate-server.
#(config IWA realm_name) primary-server host [port]
   Specifies the primary server host and port.
#(config IWA realm_name) rename new_realm_name
    Renames this realm to new realm name.
#(config IWA realm_name) timeout seconds
   Specifies the IWA request timeout.
#(config IWA realm name) ssl {disable | enable}
   Disables/enables SSL communication between the SG appliance and BCAAA.
#(config IWA realm name) ssl-verify-server {disable | enable}
   Specifies whether or not to verify the BCAAA certificate.
#(config IWA realm_name) view
   Displays this realm's configuration.
#(config IWA realm name) virtual-url url
   Specifies the virtual URL to use for this realm. If no URL is specified the global transparent proxy virtual
   URL is used.
```

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security IWA edit-realm testIWA
#(config IWA testIWA) cache-duration 1500
  ok
#(config IWA testIWA) no alternate server
  ok
#(config IWA testIWA) exit
#(config)
```

#(config security Idap)

Blue Coat supports both LDAP v2 and LDAP v3, but recommends LDAP v3 because it uses Transport Layer Security (TLS) and SSL to provide a secure connection between the SG appliance and the LDAP server.

An LDAP directory, either version 2 or version 3, consists of a simple tree hierarchy. An LDAP directory might span multiple LDAP servers. In LDAP v3, servers can return referrals to others servers back to the client, allowing the client to follow those referrals if desired.

Directory services simplify administration; any additions or changes made once to the information in the directory are immediately available to all users and directory-enabled applications, devices, and SG appliances.

The SG appliance supports the use of external LDAP database servers to authenticate and authorize users on a per-group or per-attribute basis.

LDAP group-based authentication for the SG appliance can be configured to support any LDAP-compliant directory including:

- Microsoft Active Directory Server
- Novell NDS/eDirectory Server
- Netscape/Sun iPlanet Directory Server
- Other

Synopsis

Allows you to configure and manage LDAP realms.

Syntax

```
#(config) security ldap [subcommands]
```

Subcommands

```
#(config) security ldap create-realm realm_name
    Creates the specified LDAP realm

#(config) security ldap delete-realm realm_name
    Deletes the specified LDAP realm.

#(config) security ldap edit-realm realm_name
    Changes the prompt. See Submodes for details.

#(config) security ldap view [realm_name]
    Displays the configuration of all LDAP realms or just the configuration for realm_name if specified.
```

Submodes

```
#(config) security ldap edit-realm realm_name
This changes the prompt to:
    #(config ldap realm_name)
Commands in the ldap realm_name mode:
    #(config ldap realm_name) alternate-server host [port]
        Specifies the alternate server host and port.

#(config ldap realm_name) cache-duration seconds
        Specifies the length of time to cache credentials for this realm.
```

```
#(config ldap realm name) case-sensitive {disable | enable}
   Specifies whether or not the LDAP server is case-sensitive.
#(config ldap realm_name) default-group-name default_group_name
   If the validate-authorized-user command is disabled and a default-group-name is configured,
   the default-group-name is used as the group name for non-existent users.
#(config ldap realm name) display-name display name
   Specifies the display name for this realm.
#(config ldap realm_name) distinguished-name user-attribute-type
   user attribute type
   Specifies the attribute type that defines the relative user name.
#(config ldap realm_name) distinguished-name base-dn {add | demote | promote |
   remove { base_dn | clear }
   Adds/demotes/promotes/removes a base DN from the base DN list, or clears the base DN list.
#(config ldap realm_name) exit
   Exits the ldap edit mode and returns to #(config) mode.
#(config ldap realm name) membership-attribute attribute name
   Specifies the attribute that defines group membership.
#(config ldap realm name) membership-type {group | user}
   Specifies the membership type. Specify group if user memberships are specified in groups. Specify user
   if memberships are specified in users.
#(config ldap realm name) membership-username (full | relative)
   Specifies the username type to use during membership lookups. The full option specifies that the
   user's FQDN is used during membership lookups, and relative option specifies that the user's relative
   username is used during membership lookups. Only one can be selected at a time.
#(confiq ldap realm name) no alternate-server
   Clears the alternate-server or membership-attribute values.
#(config ldap realm_name) no default-group-name
   Clears the default group name.
#(config ldap realm_name) no membership-attribute
   Clears the membership-attribute values.
#(config ldap realm name) objectclass container {add | remove}
   {container objectclass | clear}
   Adds/removes container objectclass values from the list (these values are used during VPM searches of
   the LDAP realm), or clears all values from the container objectclass list.
#(config ldap realm_name) objectclass group {add | remove} {group_objectclass |
   clear}
   Adds/removes group objectclass values from the list (these values are used during VPM searches of the
   LDAP realm), or clears all values from the group objectclass list.
#(config ldap realm_name) objectclass user {add | remove} {user_objectclass |
   Adds/removes user objectclass values from the list (these values are used during VPM searches of the
   LDAP realm), or clears all values from the user objectclass list.
#(config ldap realm name) primary-server host [port]
   Specifies the primary server host and port.
#(config ldap realm_name) protocol-version {2 | 3}
   Specifies the LDAP version to use. SSL and referral processing are not available in LDAP v2.
#(config ldap realm name) referrals-follow {disable | enable}
   Disables/enables referral processing. This is available in LDAP v3 only.
```

```
#(config ldap realm name) rename new realm name
   Renames this realm to new realm name.
#(config ldap realm name) search anonymous {disable | enable}
    Disables/enables anonymous searches.
#(config ldap realm_name) search dereference {always | finding | never |
    searching }
   Specifies the dereference level. Specify always to always dereference aliases. Specify finding to
    dereference aliases only while locating the base of the search. Specify searching to dereference aliases
   only after locating the base of the search. Specify never to never dereference aliases.
#(config ldap realm name) search encrypted-password encrypted password
   Specifies the password to bind with during searches in encrypted format.
#(config ldap realm_name) search password password
   Specifies the password to bind with during searches.
#(config ldap realm_name) search user-dn user_dn
   Specifies the user DN to bind with during searches.
#(config ldap realm name) server-type {ad | iplanet | nds | other}
   Specifies the LDAP server type for this realm.
#(config ldap realm name) spoof-authentication {none | origin | proxy}
    Enables/disables the forwarding of authenticated credentials to the origin content server or for proxy
   authentication. Flush the entries for a realm if the spoof-authentication value is changed to ensure that
    the spoof-authentication value is immediately applied.
   You can only choose one.
       If set to origin, the spoofed header is an Authorization: header.
       If set to proxy, the spoofed header is a Proxy-Authorization: header.
       If set to none, no spoofing is done.
#(config ldap realm name) ssl {disable | enable}
   Disables/enables SSL communication between the SG appliance and the LDAP server. This is only
   available in LDAP v3.
#(config ldap realm_name) ssl-verify-server {disable | enable}
   Specifies whether or not to verify the LDAP server's certificate.
#(config ldap realm_name) timeout seconds
   Specifies the LDAP server's timeout.
#(config ldap realm name) validate-authorized-user {enable | disable}
   When validate-authorized-user is enabled, an authorization (not authentication) request
   verifies that the user exists in the LDAP server. If the user does not exist, the authorization request fails
   (authentication requests always require the user to exist).
   When validate-authorized-user is disabled, no user existence check is made for an authorization
   request. If the user does not exist, the authorization request succeeds
#(config ldap realm name) view
   Displays this realm's configuration.
#(config ldap realm name) virtual-url url
```

Specifies the virtual URL to use for this realm. If no URL is specified the global transparent proxy virtual

For More Information

URL is used.

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security ldap edit-realm testldap
#(config ldap testldap) server-type iplanet
  ok
#(config ldap testldap) spoof-authentication origin
  ok
#(config ldap testldap) exit
```

#(config) security local

Using a Local realm is appropriate when the network topography does not include external authentication or when you want to add users and administrators to be used by the SG appliance only.

The Local realm (you can create up to 40) uses a *Local User List*, a collection of users and groups stored locally on the SG appliance. You can create up to 50 different Local User Lists. Multiple Local realms can reference the same list at the same time, although each realm can only reference one list at a time. The default list used by the realm can be changed at any time.

Synopsis

Allows you to configure and manage local realms.

Syntax

```
#(config) security local [subcommands]
```

Subcommands

```
#(config) security local create-realm realm_name
Creates the specified local realm.

#(config) security local delete realm realm_name
```

```
#(config) security local delete-realm realm_name
   Deletes the specified local realm.
```

```
#(config) security local edit-realm realm_name Changes the prompt. See Submodes for details.
```

```
#(config) security local view [realm_name]

Displays the configuration of all local realms or just the configuration for realm_name if specified.
```

Submodes

```
#(config) security local edit-realm realm name
This changes the prompt to:
   #(config local realm_name)
Commands found in this submode include:
   #(config local realm name) cache-duration seconds
       Specifies the length of time to cache credentials for this realm.
   #(config local realm_name) default-group-name default_group_name
       If the validate-authorized-user command is disabled and a default-group-name is configured,
       the default-group-name is used as the group name for non-existent users.
   #(config local realm_name) display-name display_name
       Specifies the display name for this realm.
   #(config local realm name) exit
       Exits configure security local mode and returns to # (config) mode.
   #(config local realm_name) local-user-list local_user_list_name
       Specifies the local user list to for this realm.
   #(config local realm_name) no default-group-name
       Clears the default group name.
   #(config local realm name) rename new realm name
       Renames this realm to new realm name
```

- #(config local realm_name) spoof-authentication {none | origin | proxy}
 Enables/disables the forwarding of authenticated credentials to the origin content server or for proxy authentication. You can only choose one.
 - If set to origin, the spoofed header is an Authorization: header.
 - If set to **proxy**, the spoofed header is a Proxy-Authorization: header.
 - If set to none, no spoofing is done.

Flush the entries for a realm if the spoof-authentication value is changed to ensure that the spoof-authentication value is immediately applied.

```
#(config local realm_name) validate-authorized-user {disable | enable}
When validate-authorized-user is enabled, an authorization (not authentication) request verifies that the user exists in the local user list. If the user does not exist in the list, the authorization request fails (authentication requests always require the user to exist).
```

When validate-authorized-user is disabled, no user existence check is made for an authorization request. If the user does not exist, the authorization request succeeds.

```
#(config local realm_name) view
Displays this realm's configuration
```

#(config local realm_name) virtual-url url

Specifies the virtual URL to use for this realm. If no URL is specified the global transparent proxy virtual URL is used.

For More Information

- □ #(config security local-user-list) on page 272
- □ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security local edit-realm testlocal
#(config local testlocal) cache-duration 1500
  ok
#(config local testlocal) spoof-authentication proxy
  ok
#(config local testlocal) exit
#(config)
```

#(config security local-user-list)

The local-user-list is only used in conjunction with local realms.

Synopsis

Manages the local-user-list used in local realms.

Syntax

```
#(config) security local-user-list [subcommands]
```

Subcommands

```
#(config) security local-user-list clear [force]
```

Clears all local user lists. Lists referenced by local realms and the default local user list are recreated but empty. Specify force to clear realms without a prompt for confirmation.

```
#(config) security local-user-list create local-user-list
Creates the local user list with the name specified
```

```
#(config) security local-user-list default append-to-default {disable | enable}
Disables/enables appending uploaded users to the default local user list.
```

```
#(config) security local-user-list default list local_user_list
Specifies the default local user list. The default list is populated during password file uploads. The default list is also the default list used by local realms when they are created
```

```
#(config) security local-user-list delete local-user-list [force]

Deletes the specified local user list. The default list and any lists used by local realms cannot be deleted. Specify force to delete the list without a prompt for confirmation.
```

```
#(config) security local-user-list edit local-user-list Changes the prompt. See Submodes.
```

Submodes

```
#(config) security local-user-list edit local_user_list
This changes the prompt to:
   #(config local-user-list local user list)
Commands found in this submode include:
   #(config local-user-list local user list) disable-all
       Disables all user accounts in the specified list.
   #(config local-user-list local user list) enable-all
       Enables all user accounts in the specified list.
   #(config local-user-list local user list) exit
       Exits configure local-user-list mode and returns to configure mode.
   #(config local-user-list local_user_list) group clear
       Clears all groups from the list. The users remain but do not belong to any groups.
   #(config local-user-list local_user_list) group create group_name
       Creates the specified group in the local user list.
   #(config local-user-list local_user_list) group delete group_name [force]
       Deletes the specified group in the local user list.
   #(config local-user-list local_user_list) lockout-duration seconds
       The length of time a user account is locked out after too many failed password attempts. The default is
       3600
```

```
#(config local-user-list local user list) max-failed-attempts attempts
   The number of failed attempts to login to an SG appliance before the user account is locked. The default
   is 60 attempts.
#(config local-user-list local_user_list) no [lockout-duration |
   max-failed-attempts | reset-interval]
   Disables the settings for this user list.
#(config local-user-list local_user_list) reset-interval seconds
   The length of seconds to wait after the last failed attempt before resetting the failed counter to zero.
#(config local-user-list local_user_list) user clear
   Clears all users from the list. The groups remain but do not have any users.
#(config local-user-list local_user_list) user create user_name
   Creates the specified user in the local user list.
#(config local-user-list local_user_list) user delete user_name [force]
   Deletes the specified user in the local user list.
#(config local-user-list local user list) user edituser name
   changes the prompt to #(config local-user-list local user list user name)
   Edits the specified user in the local user list.
#(config local-user-list local user list user name) { disable | enable }
   Disables/enables the user account.
#(config local-user-list local user list user name) exit
   Exits configure local-user-list user 1ist mode and returns to configure local-user-list mode.
#(config local-user-list local_user_list user_name) group {add | remove}
   group name
   Adds/removes the specified group from the user.
#(config local-user-list local_user_list user_name) hashed-password
   hashed password
   Specifies the user's password in hashed format.
#(config local-user-list local_user_list user_name) password password
   Specifies the user's password.
#(config local-user-list local_user_list user_name) view
   Displays the user account.
#(config local-user-list local user list) view
   Displays all users and groups in the local user list.
```

For More Information

- □ #(config) security local on page 270
- □ *Volume 5: Securing the Blue Coat SG Appliance*

```
#(config) security local-user-list edit testlul
#(config local-user-list testlul) user create testuser
  ok
#(config local-user-list testlul) user edit testuser
#(config local-user-list testlul testuser) enable
  ok
#(config local-user-list testlul testuser) exit
#(config local-user-list testlul testuser) exit
#(config local-user-list testlul) exit
#(config)
```

#(config security management)

Synopsis

Manages the automatic logging out of a user and sets the name of realm in the management console challenge.

Syntax

#(config) security management [subcommands]

Subcommands

- #(config) security management auto-logout-timeout seconds
 Specifies the length of a management console session before the administrator is required to re-enter credentials. The default is 900 seconds (15 minutes). Acceptable values are between 300 and 86400 seconds (5 minutes to 24 hours).
- #(config) security management display-realm realm_name

 Specifies the realm to display in the management console challenge. The default value is the IP address of the SG appliance.
- #(config) security management no auto-logout-timeout Disables the automatic session logout.
- #(config) security management no display-realm

 Resets the display realm to be the IP address of the SG appliance.

For More Information

□ Volume 2: Getting Started

Example

#(config) security management auto-logout-timeout seconds

#(config) security password and hashed_password

Synopsis

Sets the console password to the password specified.

Syntax

```
#(config) security password "password"
#(config) security password hashed-password hashed password
```

Subcommands

```
\# (\texttt{config}) \ \ \textbf{security password} \ \ "password"
```

Note that the password must be in quotes. This is the password required to enter enable mode from the CLI when using console credentials, the serial console, or RSA SSH.

```
\#(\texttt{config}) security hashed-password hashed_password
```

The password in hashed format. You can either hash the password prior to entering it, or you can allow the SG appliance to hash the password.

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security password "good2test"
```

#(config) security password-display

Synopsis

Sets various display settings.

Syntax

```
#(config) security password-display [subcommands]
```

Subcommands

```
#(config) security password-display {encrypted | none}
Specifies the format to display passwords in show config output. Specify encrypted to display encrypted passwords. Specify none to display no passwords.
```

```
#(config) security password-display keyring
Specifies the keyring to use for password encryption.
```

```
#(config) security password-display view Displays the current password display settings.
```

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security password-display view
Password display mode: Encrypted
Password encryption keyring: configuration-passwords-key
```

#(config security policy-substitution)

A Policy Substitution realm provides a mechanism for identifying and authorizing users based on information in the request to the SG appliance. The realm uses information in the request and about the client to identify the user. The realm is configured to construct user identity information by using policy substitutions.

The Policy Substitution realm is used typically for best-effort user discovery, mainly for logging and subsequent reporting purposes, without the need to authenticate the user. Be aware that if you use Policy Substitution realms to provide granular policy on a user, it might not be very secure because the information used to identify the user can be forged.

Synopsis

Allows you to create and manage policy-substitution realms.

Syntax

```
#(config) security polity-substitution [subcommands]
```

Subcommands

```
#(config) security polity-substitution create-realm realm_name
    Creates the specified policy-substitution realm
```

```
#(config) security polity-substitution delete-realm realm_name Deletes the specified policy-substitution realm.
```

```
#(config) security polity-substitution edit-realm realm_name Changes the prompt. See Submodes for details.
```

```
#(config) security polity-substitution view [realm_name]
Displays the configuration of all policy-substitution realms or just the configuration for realm_name if
specified.
```

Submodes

```
\# (\texttt{config}) \ \ \textbf{security policy-substitution edit-realm} \ \ \textit{realm\_name}
```

This changes the prompt to:

```
#(config policy-substitution realm_name)
```

Commands found in this submode include:

```
#(config policy-substitution realm_name) authorization-realm-name realm_name
This option is only required if you are associating an authorization realm with the Policy Substitution realm.
```

```
#(config policy-substitution realm_name) cache-duration seconds Specifies the length of time to cache credentials for this realm.
```

```
#(config policy-substitution realm_name) exit
Exits configure policy-substitution mode and returns to configure mode.
```

#(config policy-substitution realm_name) full-username construction_rule
The full username as created through policy substitutions. The construction rule is made up any of the substitutions whose values are available at client logon, listed in Appendix D, "CPL Substitutions," in Volume 11: Content Policy Language Guide.

Note: The username and full username attributes are character strings that contain policy substitutions. When authentication is required for the transaction, these character strings are processed by the policy substitution mechanism, using the current transaction as input. The resulting string is stored in the user object in the transaction, and becomes the user's identity.

To create full usernames for various uses in Policy Substitution realms, refer to *Volume 11: Content Policy Language Guide*.

- #(config policy-substitution realm_name) no authorization-realm-name Clears the authorization realm name.
- #(config policy-substitution realm_name) rename new_realm_name Renames this realm to new realm name.
- #(config policy-substitution realm name) username construction rule

The username as created through policy substitutions. Note that the username is only required if you are using an authorization realm. The construction rule is made up any of the policy substitutions whose values are available at client logon, listed in Appendix D, "CPL Substitutions," in *Volume 11: Content Policy Language Guide*.

Note: The username and full username attributes are character strings that contain policy substitutions. When authentication is required for the transaction, these character strings are processed by the policy substitution mechanism, using the current transaction as input. The resulting string is stored in the user object in the transaction, and becomes the user's identity.

To create usernames for the various uses of Policy Substitution realms, refer to *Volume 11: Content Policy Language Guide*

```
#(config policy-substitution realm_name) view
Displays this realm's configuration.
```

#(config policy-substitution realm_name) virtual-url url Specifies the virtual URL to use for this realm. If no URL is specified the global transparent proxy virtual URL is used.

For More Information

- Volume 9: Access Logging
- Volume 11: Content Policy Language Guide

```
#(config) security policy-substitution edit-realm PS1
#(config policy-substitution PS1) authorization-realm-name LDAP1
#(config policy-substitution PS1) username $(netbios.messenger-username)
#(config policy-substitution PS1) full-username
cn=$(netbios.messenger-username),cn=users,dc=$(netbios.computer-domain),dc=company,dc=com
```

#(config security radius)

RADIUS is often the protocol of choice for ISPs or enterprises with very large numbers of users. RADIUS is designed to handle these large numbers through centralized user administration that eases the repetitive tasks of adding and deleting users and their authentication information. RADIUS also inherently provides some protection against sniffing.

Some RADIUS servers support one-time passwords. One-time passwords are passwords that become invalid as soon as they are used. The passwords are often generated by a token or program, although pre-printed lists are also used. Using one-time passwords ensures that the password cannot be used in a replay attack.

The SG appliance's one-time password support works with products such as Secure Computing SafeWord synchronous and asynchronous tokens and RSA SecurID tokens.

The SG appliance supports RADIUS servers that use challenge/response as part of the authentication process. SafeWord asynchronous tokens use challenge/response to provide authentication. SecurID tokens use challenge/response to initialize or change PINs.

Synopsis

Allows you to create and manage RADIUS realms.

Syntax

```
#(config) security radius [subcommands]
```

Subcommands

```
#(config) security radius create-realm realm_name
    Creates the specified RADIUS realm

#(config) security radius delete-realm realm_name
    Deletes the specified RADIUS realm.

#(config) security radius edit-realm realm_name
    Changes the prompt. See Submodes for details.

#(config) security radius view [realm_name]
    Displays the configuration of all RADIUS realms or just the configuration for realm_name if specified.
```

Submodes

```
#(config) security radius edit-realm realm_name
This changes the prompt to:
    #(config radius realm_name)
```

Commands found in this submode include:

```
#(config radius realm_name) alternate-server encrypted-secret encrypted_secret
   Specifies the alternate server secret in encrypted format. Note that you must create the encrypted secret
   before executing the host [port] command.
#(config radius realm_name) alternate-server host [port]
   Specifies the alternate server host and port.
```

#(config radius realm_name) alternate-server secret secret
Specifies the alternate server secret. Note that you must create the secret before executing the host
[port] command

```
#(config radius realm_name) cache-duration seconds
Specifies the length of time to cache credentials for this realm.
```

```
#(config radius realm name) case-sensitive {disable | enable}
   Specifies whether or not the RADIUS server is case-sensitive.
#(config radius realm_name) display-name display_name
   Specifies the display name for this realm.
#(config radius realm_name) exit
   Exits configure radius-realm mode and returns to configure mode.
#(config radius realm name) no alternate-server
   Clears the alternate-server.
#(config radius realm name) one-time-passwords {enable | disable}
   Allows you to use one-time passwords for authentication. The default is disabled.
#(config radius realm_name) primary-server encrypted-secret encrypted_secret
   Specifies the primary server secret in encrypted format.
#(config radius realm name) primary-server host [port]
   Specifies the primary server host and port.
#(config radius realm name) primary-server secret secret
   Specifies the primary server secret.
#(config radius realm_name) rename new_realm_name
   Renames this realm to new_realm_name.
#(config radius realm name) timeout seconds
```

- Consider the DADILIC research times and This is the same
 - Specifies the RADIUS request timeout. This is the number of seconds the SG appliance allows for each request attempt before giving up on a server and trying another server. Within a timeout multiple packets can be sent to the server, in case the network is busy and packets are lost. The default request timeout is 10 seconds
- #(config radius realm_name) server-retry count
 Specifies the number of authentication retry attempts. This is the number of attempts permitted before marking a server offline. The client maintains an average response time from the server; the retry interval is initially twice the average. If that retry packet fails, then the next packet waits twice as long again. This increases until it reaches the timeout value. The default number of retries is 10.
- #(config radius realm_name) spoof-authentication {none | origin | proxy} Enables/disables the forwarding of authenticated credentials to the origin content server or for proxy authentication. You can only choose one.
 - If set to origin, the spoofed header is an Authorization: header.
 - If set to **proxy**, the spoofed header is a Proxy-Authorization: header.
 - If set to none, no spoofing is done.

Flush the entries for a realm if the spoof-authentication value is changed to ensure that the spoof-authentication value is immediately applied.

```
#(config radius realm_name) view
Displays this realm's configuration.
```

#(config radius realm_name) virtual-url url

Specifies the virtual URL to use for this realm. If no URL is specified the global transparent proxy virtual URL is used.

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security radius edit-realm testradius
#(config radius testradius) server-retry 8
  ok
#(config radius testradius) spoof-authentication proxy
  ok
#(config radius testradius) exit
```

#(config security request-storage)

When a request requiring the user to be challenged with a form contains a body, the request is stored on the SG appliance while the user is being authenticated. Storage options include:

- □ the maximum request size.
- the expiration of the request.
- whether to verify the IP address of the client requesting against the original request.
- whether to allow redirects from the origin server

The storage options are global, applying to all form exceptions you use.

The global allow redirects configuration option can be overridden on a finer granularity in policy using the authenticate.redirect_stored_requests(yes|no) action.

Synopsis

Used with authentication forms to store requests.

Syntax

```
#(config) security request-management [subcommands]
```

Subcommands

```
#(config) security request-management allow-redirects {disable | enable}
   Specifies whether to allow redirects. The default is disable.

#(config) security request-management expiry-time seconds
   Sets the amount of time before the stored request expires. The default is 300 seconds (five minutes).

#(config) security request-management max-size megabytes
   Sets the maximum POST request size during authentication. The default is 50 megabytes.

#(config) security request-management verify-ip {disable | enable}
   Enables or disables the verify-ip option. The default is to enable the SG appliance to verify the IP address against the original request.
```

For More Information

- □ #(config security authentication-forms) on page 251
- □ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security request-storage max-size megabytes
#(config) security request-storage expiry-time seconds
#(config) security request-storage verify-ip enable | disable
#(config) security request-storage allow-redirects enable | disable
```

#(config security sequence)

Once a realm is configured, you can associate it with other realms to allow Blue Coat to search for the proper authentication credentials for a specific user. That is, if the credentials are not acceptable to the first realm, they are sent to the second, and so on until a match is found or all the realms are exhausted. This is called *sequencing*.

Synopsis

Allows you to create and manage sequence realms.

Syntax

```
#(config) security sequence [subcommands]
```

Subcommands

```
#(config) security sequence create-realm realm_name
    Creates the specified sequence realm
#(config) security sequence delete-realm realm_name
    Deletes the specified sequence realm.

#(config) security sequence edit-realm realm_name
    Changes the prompt. See Submodes for details.

#(config) security sequence view [realm_name]
    Displays the configuration of all sequence realms or just the configuration for realm_name if specified.

#(config) security sequence edit-realm realm_sequence_name

This changes the prompt to:

#(config sequence realm_sequence_name)
```

Submodes

Commands available in this submode include:

```
#(config sequence realm sequence name) display-name display name
   Specifies the display name for this realm.
#(config sequence realm_sequence_name) exit
   Exits configure sequence-realm mode and returns to configure mode.
#(config sequence realm_sequence_name) IWA-only-once {disable | enable}
   Specifies whether or not to challenge for credentials for the IWA realm one or multiple times.
#(config sequence realm_sequence_name) realm {add | demote | promote | remove}
   {realm_name | clear}
   Adds/demotes/promotes/removes a realm from the realm sequence, or clears all realms from the realm
   sequence.
#(config sequence realm_sequence_name) rename new_realm_name
   Renames this realm to new_realm_sequence_name.
#(config sequence realm sequence name) view
   Displays this realm's configuration.
#(config sequence realm sequence name) virtual-url url
   Specifies the virtual URL to use for this realm sequence. If no URL is specified the global transparent
   proxy virtual URL is used.
```

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security sequence edit-realm testsequence
#(config sequence testsequence) IWA-only-once disable
ok
#(config sequence testsequence) realm clear
ok
#(config sequence testsequence) exit
```

#(config security siteminder)

Within the SiteMinder system, BCAAA acts as a custom Web agent. It communicates with the SiteMinder policy server to authenticate the user and to obtain a SiteMinder session token, response attribute information, and group membership information.

Custom header and cookie response attributes associated with **OnAuthAccept** and **OnAccessAccept** attributes are obtained from the policy server and forwarded to the SG appliance. They can (as an option) be included in requests forwarded by the *appliance*.

Within the SG system, BCAAA acts as its agent to communicate with the SiteMinder server. The SG appliance provides the user information to be validated to BCAAA, and receives the session token and other information from BCAAA.

Each SG SiteMinder realm used causes the creation of a BCAAA process on the Windows host computer running BCAAA. A single host computer can support multiple SG realms (from the same or different SG appliances); the number depends on the capacity of the BCAAA host computer and the amount of activity in the realms.

Note: Each (active) SiteMinder realm on the SG appliance should reference a different agent on the Policy Server.

Configuration of the SG's realm must be coordinated with configuration of the SiteMinder policy server. Each must be configured to be aware of the other. In addition, certain SiteMinder responses must be configured so that BCAAA gets the information the SG appliance needs.

Synopsis

Allows you to create and manage SiteMinder realms.

Syntax

```
#(config) security siteminder [subcommands]
```

Subcommands

- #(config) security siteminder create-realm realm_name
 Creates the specified SiteMinder realm
- #(config) security siteminder delete-realm realm_name Deletes the specified SiteMinder realm.
- #(config) security siteminder edit-realm_name Changes the prompt. See Submodes for details.
- #(config) security siteminder view [realm_name]
 Displays the configuration of all SiteMinder realms or just the configuration for realm_name if
 specified.

Submodes

```
#(config) security siteminder edit-realm realm name
This changes the prompt to:
   #(config siteminder realm name)
Commands in this submode include:
   #(config siteminder realm name) add-header-responses {enable | disable}
       Enable if your Web applications need information from the SiteMinder policy server responses.
   #(config siteminder realm_name) alternate-agent agent_name
       Specifies the alternate agent.
   #(config siteminder realm_name) alternate-agent encrypted-secret
       encrypted-shared-secret
       Specifies the alternate agent secret in encrypted format.
   #(config siteminder realm_name) alternate-agent host
       The host ID or the IP address of the system that contains the alternate agent.
   #(config siteminder realm name) alternate-agent port
       The port where the agent listens.
   #(config siteminder realm_name) alternate-agent shared-secret secret
       Specifies the alternate agent secret.
   #(config siteminder realm_name) alternate-agent always-redirect-offbox
       Enables or disables SSO.
   #(config siteminder realm_name) always-redirect-offbox {enable | disable}
       The SG appliance realm can be configured to redirect to an off-box authentication service
       always. The URL of the service is configured in the scheme definition on the SiteMinder policy
       server. The SG realm is then configured with always-redirect-offbox enabled.
   #(config siteminder realm_name) cache-duration seconds
       Specifies the length of time to cache credentials for this realm.
   #(config siteminder realm name) case-sensitive {enable | disable}
       Specifies whether the SiteMinder server is case-sensitive.
   #(config siteminder realm_name) display-name display_name
       Specifies the display name for this realm.
   #(config siteminder realm_name) exit
       Exits configure siteminder-realm mode and returns to configure mode.
   #(config siteminder realm name) no alternate-agent
       Clears the alternate agent configuration.
   #(config siteminder realm_name) primary-agent agent_name
       Specifies the primary agent.
   #(config siteminder realm_name) primary-agent encrypted-secret
       encrypted-shared-secret
       Specifies the primary agent secret in encrypted format.
   #(config siteminder realm name) primary-agent host
       The host ID or the IP address of the system that contains the primary agent.
   #(config siteminder realm name) primary-agent port
       The port where the agent listens.
   #(config siteminder realm_name) primary-agent shared-secret secret
       Specifies the primary agent secret.
```

- #(config siteminder realm_name) primary-agent always-redirect-offbox Enables or disables the SSO-Only mode.
- #(config siteminder realm_name) protected-resource-name resource-name
 The protected resource name is the same as the resource name on the SiteMinder server that has rules and policy defined for it.
- #(config siteminder realm_name) rename new_realm_name
 Renames this realm to new realm name.
- #(config siteminder realm_name) server-mode {failover | round-robin}
 Behavior of the server. Failover mode falls back to one of the other servers if the primary one is down.
 Round-robin modes specifies that all of the servers should be used together in a round-robin approach.
 Failover is the default
- #(config siteminder realm_name) validate-client-ip {disable | enable}

 Enables validation of the client IP address. If the client IP address in the SSO cookie might be valid yet different from the current request client IP address, due to downstream proxies or other devices, disable client IP validation. The SiteMinder agents participating in SSO with the SG appliance should also be modified. The TransientIPCheck variable should be set to yes to enable IP validation and no to disable it

Enable is the default.

- #(config siteminder realm_name) siteminder-server create server_name Creates a SiteMinder server.
- #(config siteminder realm_name) siteminder-server delete server_name
 Deletes a SiteMinder server.
- #(config siteminder realm_name) siteminder-server edit server_name
 This changes the prompt to #(config siteminder realm_name server_name).
- #(config siteminder realm_name server_name) accounting-port port_number
 The default is 44441. The ports should be the same as the ports configured on the SiteMinder policy server. The valid port range is 1-65535.
- #(config siteminder realm_name server_name) authentication-port port_number
 The default is 44442. The ports should be the same as the ports configured on the SiteMinder server. The valid port range is 1-65535.
- #(config siteminder realm_name server_name) authorization-port port_number
 The default is 44443. The ports should be the same as the ports configured on the SiteMinder server. The valid port range is 1-65535.
- #(config siteminder realm_name server_name) connection-increment number

 The default is 1. The connection increment specifies how many connections to open at a time if more are needed and the maximum is not exceeded.
- #(config siteminder realm_name server_name) exit
 Leaves the server_name prompt and returns to the SiteMinder realm_name prompt.
- #(config siteminder realm_name server_name) ip-address ip_address
 The IP address of the SiteMinder server.
- #(config siteminder realm_name server_name) max-connections number The default is 256. The maximum number of connections is 32768.
- #(config siteminder realm_name server_name) min-connections number The default is 1.
- #(config siteminder realm_name server_name) timeout seconds
 The default is 60.
- #(config siteminder realm_name server_name) view Displays the server's configuration.

```
#(config siteminder realm_name) ssl {enable | disable}
   Disables/enables SSL communication between the SG appliance and BCAAA.
#(config siteminder realm_name) ssl-verify-agent {enable | disable}
   Specifies whether to verify the BCAAA certificate.
#(config siteminder realm_name) timeout seconds
#(config siteminder realm_name) view
   Displays this realm's configuration.
#(config siteminder realm_name) virtual-url
   Specifies the virtual URL to use for this SiteMinder realm. If no URL is specified the global transparent proxy virtual URL is used.
```

For More Information

- □ #(config security coreid) on page 255
- □ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security siteminder edit-realm test2
#(config siteminder test2) server-mode round-robin
ok
#(config siteminder test2) ssl enable
ok
#(config siteminder test2) exit
```

#(config windows-sso)

In a Windows SSO realm, the client is never challenged for authentication. Instead, the BCAAA agent collects information about the current logged on user from the domain controller and/or by querying the client machine. Then the IP address of an incoming client request is mapped to a user identity in the domain. If authorization information is also needed, then another realm (LDAP or local) must be created.

Synopsis

Allows you to create and manage Windows SSO realms.

Syntax

```
#(config) security windows-sso [subcommands]
```

Subcommands

```
#(config) security windows-sso create-realm realm name
   Creates the specified Windows SSO realm.
#(config) security windows-sso edit-realm_name
   Changes the prompt to allow configuration for the specified realm name.
   SGOS#(config windows-sso realm_name)alternate-agent {host host name | port
       port_number}
       Specifies the alternate agent hostname and port number.
   SGOS#(config windows-sso realm_name) authorization {realm-name
       authorization-realm-name | username username | no
       {authorization-realm-name | username}}
   SGOS#(config windows-sso realm_name) cache-duration seconds
       Specifies the length of time to cache credentials for this realm.
   SGOS#(config windows-sso realm name) exit
       Leaves the windows-sso edit-realm mode.
   SGOS#(config windows-sso realm name) no alternate-agent
       Removes the alternate agent.
   SGOS#(config windows-sso realm_name) primary-agent {host hostname | port
       port number
       Specifies the primary agent hostname and port number.
   SGOS#(config windows-sso realm name) rename new realm name
       Renames the current realm to new_realm_name.
   SGOS#(config windows-sso realm name) ssl {enable | disable}
       Enables or disables SSL between the SG appliance and the BCAAA service.
   SGOS#(config windows-sso realm_name) ssl-verify-agent {enable | disable}
       Enables or disables verification of the BCAAA certificate. By default, if SSL is enabled, the Windows
       SSO BCAAA certificate is verified.
   SGOS#(config windows-sso realm_name) sso-type {query-client | query-dc |
       query-dc-client}
       Selects the method of querying: client, domain controller, or both. The default is domain controller.
   SGOS#(config windows-sso realm name) timeout seconds
       The time allotted for each request attempt. The default is 60 seconds.
   SGOS#(config windows-sso realm_name) view
       Displays this realm's configuration.
```

```
#(config) security windows-sso delete-realm realm_name Deletes the specified Windows SSO realm.
```

#(config) security windows-sso view [realm_name]
Displays the configuration of all Windows SSO realms or just the configuration for realm_name if
specified.

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
SGOS#(config) security windows-sso edit-realm test2
SGOS#(config windows-sso test2) ssotype query-client-dc ok
SGOS#(config windows-sso test2) exit
```

#(config) security transparent-proxy-auth

Synopsis

Configures authentication for transparent proxies

Syntax

```
#(config) security transparent-proxy-auth [subcommands]
```

Subcommands

```
#(config) security transparent-proxy-auth cookie {persistent | session}
    Specifies whether to use persistent or session cookies.

#(config) security transparent-proxy-auth method {ip | cookie}
    Specifies whether to use IP or cookie surrogate credentials.

#(config) security transparent-proxy-auth time-to-live {ip | persistent-cookie}
    minutes
    Specifies the length of time that the surrogate credentials are considered valid.

#(config) security transparent-proxy-auth virtual-url url
    Specifies the virtual URL to which requests requiring authentication are redirected.
```

For More Information

□ Volume 2: Getting Started

```
#(config) security transparent-proxy-auth method cookie
#(config) security transparent-proxy-auth cookie persistent
#(config) security transparent-proxy-auth time-to-live persistent-cookie 30
```

#(config) security username

Synopsis

Sets the console username.

Syntax

```
#(config) security username name
```

For More Information

□ Volume 5: Securing the Blue Coat SG Appliance

```
#(config) security username QATest
```

#(config) session-monitor

Synopsis

Use this command to configure options to monitor RADIUS accounting messages and to maintain a session table based on the information in these messages.

Syntax

```
#(config) session-monitor
This changes the prompt to:
   #(config session-monitor)
```

Subcommands

```
#(config session-monitor) cluster disable
    Disables cluster support.
#(config session-monitor) cluster enable
   Enables cluster support. The group address must be set before the cluster can be enabled.
#(config session-monitor) cluster grace-period seconds
   Set the time to keep session transactions in memory while waiting for slave logins. This can be set to
    allow session table synchronization to occur after the synchronization-delay has expired. The default is
   30 seconds; the range is 0 to 2^31-1 seconds.
#(config session-monitor) cluster [no] group-address IP Address
   Set or clear (the default) the failover group IP address. This must be an existing failover group address.
#(config session-monitor) cluster port port
   Set the TCP/IP port for the session replication control. The default is 55555.
#(config session-monitor) cluster synchronization-delay seconds
   Set the maximum time to wait for session table synchronization. The default is zero; the range is from \boldsymbol{0}
    to 2 ^31 -1 seconds. During this time evaluation of $ (session.username) is delayed, so proxy traffic
    might also be delayed.
#(config session-monitor) disable
    Disable (the default) session monitoring.
#(config session-monitor) enable
   Enable session monitoring.
#(config session-monitor) max-entries integer
```

The maximum number of entries in the session table. The default is 500,000; the range is from 1 to 2,000,000. If the table reaches the maximum, additional START messages are ignored.

```
#(config session-monitor) radius acct-listen-port port
   The port number where the SG appliance listens for accounting messages.
```

```
#(config session-monitor) radius authentication {disable | enable}
```

Enable or disable (the default) the authentication of RADIUS messages using the shared secret. Note that the shared secret must be configured before authentication is enabled.

```
#(config session-monitor) radius encrypted-shared-secret encrypted-secret
    Specify the shared secret (in encrypted form) used for RADIUS protocol authentication. The secret is
    decrypted using the configuration-passwords-key.
```

```
#(config session-monitor) radius no shared-secret
   Clears the shared secret used for RADIUS protocol authentication.
#(config session-monitor) radius respond {disable | enable}
   Enable (the default) or disable generation of RADIUS responses.
```

```
#(config session-monitor) radius shared-secret plaintext_secret
   Specify the shared secret used for RAIDUS protocol in plaintext.
#(config session-monitor) timeout minutes
   The amount of time before a session table entry assumes a STOP message has been sent. The default is
```

120 minutes; the range is from 0 to 65535 minutes. Zero indicates no timeout.

```
#(config session-monitor) view
View the session-monitor configuration.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) session-monitor
SGOS#(config session-monitor) view
General:
 Status: disabled
 Entry timeout: 120 minutes
 Maximum entries: 500000
 Cluster support: disabled
 Cluster port: 55555
 Cluster group address: none
 Synchronization delay: 0
 Synchronization grace period: 30
Accounting protocol: radius
 Radius accounting:
 Listen ports:
 Accounting: 1813
 Responses: Enabled
 Authentication: Disabled
 Shared secret: *********
```

#(config) sg-client #(config) sg-client

#(config) sg-client

Synopsis

Use this command to configure the Client Manager and client configuration options for the SG Client.

Syntax

```
#(config) sg-client
This changes the prompt to:
#(config sg-client)
```

Subcommands

```
#(config sg-client) enable
```

Enable this appliance as the Client Manager. You can have only one Client Manager in your ADN network.

Note: Before you can enable an appliance to be the Client Manager, you must configure the ADN manager clients will use. If you try to enable the Client Manager before you configure an ADN manager for clients, the following error displays: The ADN primary manager must be set prior to enabling the SG Client Manager. To set the clients' ADN manager, see "#config (sg-client adn)" on page 297.

```
#(config sg-client) disable
```

Do not use this appliance as the Client Manager.

- #(config sg-client) client-manager host {from-client-address | <ip-address | host>}
 Identify this appliance as the Client Manager in one of the following ways:
 - from-client-address: (*Recommended*.) Use this command if you want clients to download the SG Client software, configuration, and updates from the host from which the clients originally obtained the software.
 - ip-address or host: Use this command only if you want to change the host from which clients download the SG Client software, configuration, and updates. Enter a fully-qualified host name or IP address only; do not preface the with http://or https://or downloads will fail.

In other words, this option enables you to change the host from which currently-installed clients obtain future software and configuration updates. Use caution when selecting this option because if clients are unable to connect to the host you enter in the adjacent field, new installations from the Client Manager and updates to existing installations will fail.

Note: Blue Coat recommends you enter the fully-qualified host name. If you enter either an unqualified host name or IP address and change it later, connections to all currently-connected clients are dropped.

```
#(config sg-client) client-manager install-port port

Port on which the host you entered in the preceding option listens for requests from clients.
```

```
#(config sg-client) client-manager keyring Name of the keyring the Client Manager will use when clients connect to it.
```

#(config) sg-client #(config) sg-client

```
#(config sg-client) max-cache-disk-percent percentage
```

Maximum percentage of client disk space to use for caching objects, such as CIFS objects. Valid values are 10—90; default is 10.

Note: The cache will always leave at least 1GB free on the system root. For more information, see the chapter on configuring the SG Client in *Volume 6: Advanced Networking*.

```
#(config sg-client) software-upgrade-path url
```

Sets the URL used to upload updated SG Client software to the Client Manager so it can make the latest SG Client software available to update or to install on client machines.

Important: After you update the Client Manager, whenever users connect using the SG Client, they will be required to update the SG Client software.

Upload the SG Client software from a URL in the following format:

```
https://host:port/sgclient/SGClient.car
```

For example,

```
https://mysg.example.com:8004/sgclient/SGClient.car
```

After you set the path from which to load the updates, see # load sg-client-software on page 57.

```
#(config sg-client) tcp-window-size bytes
```

Sets the number of bytes allowed before acknowledgement (the value must be between 8192 and 4194304). If you know the bandwidth and roundtrip delay, the TCP window size you should is us approximately 2 * bandwidth * delay. For example, if the bandwidth of the link is 8 Mbits/sec and the round-trip delay is 0.75 seconds:

```
TCP window size = 2 * 8 Mbits/sec * 0.75 sec = 12 Mbits = 1.5 Mbytes
```

The setting in this example would be 1500000 bytes. This number goes up as either bandwidth or delay increases, and goes down as they decrease. Because the bandwidth and delay for mobile users can vary, Blue Coat recommends you test mobile client performance in a controlled environment before deciding on a value to use in production.

```
#(config sg-client) update-interval minutes
```

Frequency clients check with the Client Manager for updated SG Client software. Default is 120.

```
#(config sg-client) view
```

View current Client Manager settings.

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) client-manager host enable
SGOS#(config) client-manager host from-client-address
SGOS#(config) software-upgrade-path
https://mysq.example.com:8004/sqclient/SGClient.car
```

#config (sg-client adn)

Synopsis

Configure ADN manager and ADN rules settings for SG Clients.

Syntax

```
#(config) sg-client
This changes the prompt to:
    #(config sg-client)
    #(config sg-client) adn
This changes the prompt to:
    #(config sg-client adn)
```

Subcommands

```
#(config sg-client adn) primary-manager ip-address
```

The IP address of the primary ADN manager. The ADN manager keeps track of and advertises the routes of the appliances it knows about. You must specify a primary manager.

The SG Client obtains the routing table from the ADN manager.

```
#(config sg-client adn) backup-manager ip-address
```

The IP address of the backup ADN manager. Configuring a backup ADN manager is optional but recommended.

If the ADN manager becomes unavailable for any reason, the backup ADN manager takes over the task of advertising routes to all ADN nodes, such as the SG Client.

```
#(config sq-client adn) manager-port port
```

ADN manager and backup manager plain listen port. (To use the SG Client in your ADN network, the ADN manager's listening mode must be configured for **Plain Only**, **Plain Read-Only**, or **Both**.)

```
#(config sg-client adn) port-list {exclude-ports | include-ports} Determines whether you will use the include ports list or exclude ports list.
```

(config sg-client adn) {exclude-ports | include-ports} {port-list | port-range} Determines which TCP ports to exclude or include in ADN tunnels. Assuming clients using the SG Client software can connect to an ADN peer that can optimize traffic to the destination IP address, this setting determines ports the clients can use (or not use).

For example, you can exclude ports or port ranges because traffic coming from those ports has already been encrypted.

For example, the following command excludes traffic from ports 22 and 443 from being routed through ADN:

```
#(config sg-client adn) exclude-ports 22,443
```

Valid values: Comma-separated list of ports and port ranges (no spaces, separated by a dash character).

```
#(config sg-client adn) exclude-subnets
```

Configure the subnets excluded from ADN acceleration

```
#(config sg-client adn exclude-subnets) {add | remove} subnet_prefix[/prefix
length]
```

Adds or removes subnets from the excluded subnets list, which is the list of subnets not included in ADN tunnels. Use a comma-separated list of IP addresses and subnets in CIDR notation.

For example, the following command excludes traffic from the IP address 128.211.168.0 and subnet 255.255.255.0 from being routed through the ADN tunnel:

```
#(config sg-client adn exclude-subnets) add 128.211.168.0/24
```

```
#(config sg-client adn exclude-subnets) clear
```

Removes all subnets from the current excluded subnet list. In other words, traffic from all IP addresses and subnets will be routed through the ADN tunnel.

```
#(config sg-client adn exclude-subnets) exit
Exits the exclude-subnets submode.
```

#(config sg-client adn exclude-subnets) view
View the list of excluded subnets.

```
#(config sg-client adn) exit
Exit the adn submode.
```

For More Information

□ Volume 6: Advanced Networking

```
#(config sg-client adn) exclude-ports 22,88,443,993,995,1352,1494,1677,3389,5900
```

#config (sg-client cifs)

Synopsis

Configure CIFS settings for SG Clients.

Syntax

```
#(config) sg-client
This changes the prompt to:
    #(config sg-client)
    #(config sg-client) cifs
This changes the prompt to:
    #(config sg-client cifs)
```

Subcommands

```
#(config sg-client cifs) directory-cache-time seconds
   Number of seconds for directory listings to remain in the cache. Default is 30.
#(config sg-client cifs) {disable | enable}
   Disable or enable CIFS acceleration. CIFS acceleration is enabled by default.
#(config sg-client cifs) exit
   Exit the sg-client cifs command.
#(config sg-client cifs) write-back {full | none}
   Determines whether or not users can continue sending data to the appliance while the appliance is writing data on the back end.
```

- full enables write-back, which in turn makes the appliance appear to the user as a file server; in other words, the appliance constantly sends approval to the client and allows the client to send data while the back end takes advantage of the compressed TCP connection.
- none disables write-back. Disabling write-back can introduce substantial latency as clients send data to the appliance and wait for acknowledgement before sending more data.

One reason to set this option to none is the risk of data loss if the link from the branch to the core server fails. There is no way to recover queued data if such a link failure occurs.

```
#(config sg-client cifs) view
View client CIFS settings.
```

For More Information

Volume 6: Advanced Networking

```
SGOS#(config sg-client cifs) enable
SGOS#(config sg-client cifs) write-back full
```

#(config) shell #(config) shell

#(config) shell

Synopsis

Use this command to configure options for the shell.

```
#(config) shell max-connections
```

Maximum number of shell connections. Allowed values are between 1 and 65535.

```
#(config) shell no
```

Disables the prompt, realm-banner, and welcome-banner strings.

```
#(config) shell prompt
```

Sets the prompt that the user sees in the shell. If the string includes white space, enclose the string in quotes.

```
#(config) shell realm-banner
```

Sets the realm banner that the user sees when logging into a realm through the shell. If the string includes white space, enclose the string in quotes.

```
#(config) shell welcome-banner
```

Sets the welcome banner that the users sees when logging into the shell. If the string includes white space, enclose the string in quotes.

For More Information

■ Volume 3: Proxies and Proxy Services

```
SGOS#(config) shell prompt "Telnet Shell >"
  ok
SGOS#(config) shell welcome-banner "Welcome to the Blue Coat Telnet Shell"
  ok
```

#(config) show

#(config) show

□ # show on page 71.

#(config) snmp #(config) snmp

#(config) snmp

Synopsis

Use this command to set SNMP (Simple Network Management Protocol) options for the SG appliance.

The SG appliance can be viewed using an SNMP management station. The SG appliance supports MIB-2 (RFC 1213).

Syntax

```
#(config) snmp
This changes the prompt to:
   #(config snmp)
```

Subcommands

```
#(config snmp) authorize-traps
    Enables SNMP authorize traps.
#(config snmp) disable
   Disables SNMP for the SG appliance.
#(config snmp) director-trap-address director ip director ID string
   Enables Director to receive SNMP traps from the SG appliance.
#(config snmp) enable
   Enables SNMP for the SG appliance.
#(config snmp) encrypted-read-community encrypted password
   Specifies encrypted read community string.
#(config snmp) encrypted-trap-community encrypted_password
   Specifies encrypted trap community string.
#(config snmp) encrypted-write-community encrypted_password
   Specifies encrypted write community string.
#(config snmp) exit
   Exits configure snmp mode and returns to configure mode.
#(config snmp) no authorize-traps
   Disables the current authorize traps settings.
#(config snmp) no sys-contact
   Disables the current system contact settings.
#(config snmp) no sys-location
   Disables the current system location settings.
#(config snmp) no trap-address {1 | 2 | 3}
   Disables the current trap address settings (for trap address 1, 2, or 3).
#(config snmp) read-community password
   Sets the read community password or encrypted-password.
#(config snmp) reset-configuration
    Resets the SNMP configuration to the default settings, clearing community strings and any IP addresses.
   You do not need to reboot the system after making these changes.
#(config snmp) snmp-writes {disable | enable}
    Enables or disables SNMP write capability.
```

#(config) snmp #(config) snmp

```
#(config snmp) sys-contact string
Sets the "sysContact" MIB variable to string.

#(config snmp) sys-location string
Sets the "sysLocation" MIB variable to string.

#(config snmp) test-trap string
Sends a policy test trap with the string as the message. Quotes are required if the message contains whitespace.

#(config snmp) trap-address {1 | 2 | 3} ip_address
Indicates which IP address(es) can receive traps and in which priority.

#(config snmp) password
Sets the trap community password or encrypted-password.

#(config snmp) view
Displays SNMP settings.

#(config snmp) write-community password
Sets the write community password or encrypted-password.
```

For More Information

□ Volume 10: Managing the Blue Coat SG Appliance

```
SGOS#(config) snmp
SGOS#(config snmp) authorize-traps
ok
SGOS#(config snmp) exit
SGOS#(config)
```

#(config) socks-gateways

Synopsis

Use this command to set the SOCKS gateways settings.

Syntax

```
#(config) socks-gateways
This changes the prompt to:
#(config socks-gateways)
```

Subcommands

```
#(config socks-gateways) create gateway_alias gateway_host SOCKS_port [version={4
| 5 [user=username password=password]
Creates a SOCKS gateway.
```

Note: The SOCKS compression feature is deprecated, as a more advanced version of this functionality is now available as part of the Application Delivery Network features. Refer to *Volume 6: Advanced Networking* for instructions on how to configure and use these features.

```
#(config socks-gateways) delete {all | gateway gateway_alias}
Deletes a SOCKS gateway.
   #(config socks-gateways) edit gateway_alias)
       Changes the prompt. See # (config socks-gateways gateway alias) on page 306.
   #(config socks-gateways) exit
       Exits configure socks-gateways mode and returns to configure mode.
   #(config socks-gateways) failure-mode {closed | open}
       Sets the default failure mode (which can be overridden by policy).
#(config socks-gateways) no path
Clears network path to download SOCKS gateway settings.
#(config socks-gateways) path url
Specifies the network path to download SOCKS gateway settings.
   #(config socks-gateways) sequence add gateway_alias
       Adds an alias to the end of the default failover sequence.
   #(config socks-gateways) sequence clear
       Clears the default failover sequence.
   #(config socks-gateways) sequence demote gateway alias
       Demotes an alias one place towards the end of the default failover sequence.
   #(config socks-gateways) sequence promote gateway_alias
       Promotes an alias one place towards the start of the default failover sequence.
   #(config socks-gateways) sequence remove gateway_alias
       Removes an alias from the default failover sequence.
   #(config socks-gateways) view
       Displays all SOCKS gateways.
```

For More Information

¬ Volume 6: Advanced Networking

```
SGOS#(config) socks-gateways
SGOS#(config socks-gateways) failure-mode open ok
SGOS#(config socks-gateways) exit
SGOS#(config)
```

#(config socks-gateways gateway_alias)

Synopsis

These commands allow you to edit the settings of a specific SOCKS gateway.

Syntax

```
#(config) socks-gateways
This changes the prompt to:
    #(config socks-gateways)
    edit gateway_alias
This changes the prompt to:
    #(config socks-gateways gateway_alias)
```

Subcommands

```
#(config socks-gateways gateway_alias) exit
   Exits configure socks-gateways gateway alias mode and returns to configure socks-gateways mode.
#(config socks-gateways gateway alias) host
   Changes the host name.
#(config socks-gateways gateway alias) no
   Optional, and only if you use version 5. Deletes the version 5 password or username.
#(config socks-gateways gateway_alias) password
   Optional, and only if you use version 5. Changes the version 5 password. If you specify a password, you
   must also specify a username.
#(config socks-gateways gateway_alias) port
   Changes the SOCKS port.
#(config socks-gateways gateway alias) user
   Optional, and only if you use version 5. Changes the version 5 username. If you specify a username, you
   must also specify a password.
#(config socks-gateways gateway_alias) version
   Changes the SOCKS version.
#(config socks-gateways gateway_alias) view
   Shows the current settings for this SOCKS gateway.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) socks-gateways
SGOS#(config socks-gateways) edit testgateway
SGOS#(config socks-gateways testgateway) version 5
ok
SGOS#(config socks-gateways testgateway) exit
SGOS#(config socks-gateways) exit
SGOS#(config)
```

#(config) socks-machine-id

Synopsis

Use this command to set the machine ID for SOCKS.

If you are using a SOCKS server for the primary or alternate gateway, you must specify the SG appliance machine ID for the Identification (Ident) protocol used by the SOCKS gateway.

Syntax

```
#(config) socks-machine-id machine_id Indicates the machine ID for the SOCKS server.
```

```
SGOS#(config) socks-machine-id 10.25.36.47 ok
```

#(config) socks-proxy

Synopsis

Use this command to configure a SOCKS proxy on anSG appliance. Only one server is permitted per SG appliance. Both SOCKSv4 and SOCKSv5 are supported by Blue Coat, and both are enabled by default.

Note that the version of SOCKS used is only configurable through policy. For example, to use only SOCKSv5:

```
socks.version=4 deny
```

Syntax

```
#(config) socks-proxy
```

Subcommands

```
#(config) socks-proxy accept-timeout seconds
Sets maximum time to wait on an inbound BIND.
```

```
#(config) socks-proxy connect-timeout seconds
Sets maximum time to wait on an outbound CONNECT.
```

#(config) socks-proxy max-connections num_connections
Sets maximum allowed SOCKS client connections.

```
#(config) socks-proxy max-idle-timeout seconds
```

Specifies the minimum timeout after which SOCKS can consider the connection for termination when the max connections are reached.

```
#(config) socks-proxy min-idle-timeout seconds
```

Specifies the max idle timeout value after which SOCKS should terminate the connection.

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config) socks-proxy accept-timeout 120 ok
```

#(config) ssh-console

Synopsis

Configures the SSH host and client keys.

Syntax

```
#(config) ssh-console
This changes the prompt to:
#(config ssh-console)
```

Subcommands

```
#(config ssh-console) create host-keypair {sshv1 | sshv2 | <Enter>}
    Creates a host-keypair for the SSH console of the specified version.

#(config ssh-console) delete client-key username key_id
    Deletes the client key with the specified username and key ID.

#(config ssh-console) delete legacy-client-key key_id
    Deletes the legacy client key.

#(config ssh-console) delete director-client-key key_id
    Deletes the Director client key.

#(config ssh-console) delete host-keypair {sshv1 | sshv2 | <Enter>}
    Deletes the specified host keypair.

#(config ssh-console) inline {client-key <eof> | director-client-key <eof>}
    Allows you add a client key or a Director client key using inline commands.

#(config ssh-console) view {client-key | director-client-key | host-public-key | user-list | versions-enabled}
    Views the SSH console parameters.
```

For More Information

- □ Volume 3: Proxies and Proxy Services
- □ #(config ssh-console) on page 133

```
#(config ssh-console) view versions-enabled SSHv2 is enabled.
```

#(config) ssl

Synopsis

Use this command to configure HTTPS termination, including managing certificates, both self-signed and those from a Certificate Signing Authority (CSA).

To configure HTTPS termination, you must complete the following tasks:

- Configure a keyring
- Configure the SSL client
- Configure the HTTPS service

Note: To do these steps, you must have a serial or SSH connection; you cannot use Telnet.

Syntax

```
#(config) ssl
```

This changes the prompt to:

```
#(config ssl)
```

Subcommands

```
#(config ssl) create ccl list_name
```

Creates a list to contain CA certificates.

```
#(config ssl) create certificate keyring_id
```

Creates a certificate. Certificates can be associated with a keyring.

You can create a self-signed certificate two ways: interactively or non-interactively.

Director uses non-interactive commands in profiles and overlays to create certificates.

```
#(config ssl) create crl crl_id
```

Create a Certificate Revocation List.

```
#(config ssl) create keyring {show | show-director | no-show} keyring_id
    [key_length]
```

Creates a keyring, with a keypair, where:

show: Keyrings created with this attribute are displayed in the show configuration output, meaning that the keyring can be included as part of a profile or overlay pushed by Director.

show-director: Keyrings created with this attribute are part of the show configuration output if the CLI connection is secure (SSH/RSA) and the command is issued from Director.

no-show: Keyrings created with this attribute are not displayed in the show configuration output and cannot be part of a profile. The no-show option is provided as additional security for environments where the keys will never be used outside of the particular SG appliance.

```
#(config ssl) create device-authentication-profile device_authentication_profile
    name [keyring]
```

Creates a device authentication profile of the specified name and keyring. The keyring must already exist. If you do not specify a keyring, the certificate is put in the appliance-key keyring.

```
#(config ssl) create signing-request keyring id
   Creates a certificate signing request. The request must be associated with a keyring.
   You can create a signing request two ways: interactively or non-interactively.
   Director uses non-interactive commands in profiles and overlays to create signing requests.
#(config ssl) create ssl-client ssl client name
   Associates the SSL client with a keyring. Only the default is permitted.
#(config ssl) delete ca-certificate name
    Deletes a CA-certificate from the SG appliance.
#(config ssl) delete ccl list_name
    Deletes a CCL list from the SG appliance.
#(config ssl) delete certificate keyring id
   Deletes the certificate associated with a keyring.
#(config ssl) delete crl list name
    Deletes the specified Certificate Revocation List.
#(config ssl) delete external-certificate name
    Deletes an external certificate from the SG appliance.
#(config ssl) delete keyring keyring_id
   Deletes a keyring, with a keypair.
#(config ssl) delete signing-request keyring_id
   Deletes a certificate signing request.
#(config ssl) delete ssl-client ssl_client_name
   Deletes an SSL client.
#(config ssl) edit ccl list_name
   Changes the prompt. See # (config ssl ccl list name) on page 314.
#(config ssl) edit crl crl id
   Changes the prompt. See # (config ssl crl_list name) on page 315.
#(config ssl) edit device-authentication-profile profile_name.
   Changes the prompt. See
#(config ssl) edit ssl-client ssl client name
   Changes the prompt. Only default is permitted. See # (config ssl
    ssl default client name) on page 317.
#(config ssl) exit
   Exits configure ssl mode and returns to configure mode.
#(config ssl) inline ca-certificate name eof
   Imports a CA certificate.
#(config ssl) inline certificate keyring_id eof
   Imports a certificate.
#(config ssl) inline crl list name
   Imports a Certificate Revocation List.
#(config ssl) inline external-certificate name eof
   Imports a certificate without the corresponding private key.
#(config ssl) inline keyring {show | show-director | no-show} keyring_id eof
   Imports a keyring, where:
    show: Keyrings created with this attribute are displayed in the show configuration output, meaning
       that the keyring can be included as part of a profile or overlay pushed by Director.
```

show-director: Keyrings created with this attribute are part of the show configuration output if the CLI connection is secure (SSH/RSA) and the command is issued from Director. no-show: Keyrings created with this attribute are not displayed in the show configuration output and cannot be part of a profile. The no-show option is provided as additional security for environments where the keys will never be used outside of the particular SG appliance. eof: End-of-file marker. This can be anything, as long as it doesn't also appear in the inline text. (If the eof appears in the inline text, the inline command completes at that point.) #(config ssl) inline signing-request keyring_id eof Imports the specified signing request. #(config ssl) load crl crl list Loads the specified CRL list. #(config ssl) proxy issuer-keyring keyring name Specifies the keyring to be used for SSL interception. SGOS#(config ssl) request-appliance-certificate Generates an appliance certificate. #(config ssl) ssl-nego-timeout seconds Configures the SSL-negotiation timeout period. The default is 300 seconds. SGOS#(config ssl) view appliance-certificate-request Displays the appliance certificate request generated by the request-appliance-certificate command. #(config ssl) view ca-certificate name Displays the Certificate Authority certificate. #(config ssl) view ccl Displays the CA-certificate lists. #(config ssl) view certificate keyring_id Displays the certificate. #(config ssl) view crl [list_name] Displays the specified Certificate Revocation List. SGOS#(config ssl) view device-authentication-profile #(config ssl) view external-certificate name Displays the external certificate. #(config ssl) view keypair {des | des3 | unencrypted} keyring_id | keyring_id} Displays the keypair. If you want to view the keypair in an encrypted format, you can optionally specify des or des3 before the keyringID. If you specify either des or des3, you are prompted for the challenge entered when the keyring was created. #(config ssl) view keyring [keyring_id] Displays the keyring. #(config ssl) view signing-request keyring id Displays the certificate signing request. #(config ssl) view ssl-client Displays summary information of SSL clients. #(config ssl) view ssl-nego-timeout Displays SSL negotiation timeout period status summary.

#(config ssl) view summary {ca-certificate | external-certificate} [name]

Displays a summary for all CA-certificate or external-certificate commands, or for the certificate name

specified.

For More Information

¬ Volume 3: Proxies and Proxy Services

```
SGOS#(config) ssl create keyring show keyring id [key length] ok

SGOS#(config ssl) view keyring keyring id

KeyringID: default

Is private key showable? yes

Have CSR? no

Have certificate? yes

Is certificate valid? yes

CA: Blue Coat SG810

Expiration Date: Jan 23 23:57:21 2013 GMT

Fingerprint: EB:BD:F8:2C:00:25:84:02:CB:82:3A:94:1E:7F:0D:E3

SGOS#(config ssl) exit

SGOS#(config)
```

#(config ssl ccl list_name)

Synopsis

Allows you to edit the CCL parameters.

Syntax

```
#(config) ssl
This changes the prompt to:
    #(config ssl) edit ccl list_name
This changes the prompt to:
    #(config ssl ccl list_name)
```

Subcommands

```
#(config ssl ccl list_name) add ca_certificate_name
   Adds a CA certificate to this list. (The CA certificate must first be imported in configure ssl mode.)
#(config ssl ccl list_name) clear
   Clears all CA certificates from the specified list.
#(config ssl ccl list_name) exit
   Exits configure ssl ccl list_name mode and returns to ssl configure mode.
#(config ssl ccl list_name) remove ca_certificate_name
   Deletes a CA certificate from this list.
#(config ssl ccl list_name) view
   Shows a summary of CA certificates in this list.
```

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config) ssl
SGOS#(config ssl) edit ccl list_name
SGOS#(config ssl ccl list_name) add CACert1
ok
SGOS#(config ssl ccl list_name) exit
SGOS#(config ssl) exit
SGOS#(config)
```

#(config ssl crl_list_name)

Synopsis

Allows you to edit the specified Certificate Revocation List name.

Syntax

```
#(config) ssl
This changes the prompt to:
    #(config ssl)
    edit crl crl_list_name
This changes the prompt to:
    #(config ssl crl_list_name)
```

Subcommands

```
#(config ssl crl_list_name) exit
   Exits configure ssl crl_list_name mode and returns to ssl configure mode.
#(config ssl crl_list_name) inline
   Imports a Certificate Revocation List.
#(config ssl crl_list_name) load
   Downloads the specified Certificate Revocation List.
#(config ssl crl_list_name) path
   Specifies the network path to download the specified Certificate Revocation List.
#(config ssl crl_list_name) view
   View the specified Certificate Revocation List.
```

For More Information

□ Volume 3: Proxies and Proxy Services

#(config ssl device-authentication-profile)

Synopsis

Allows you to edit a device authentication profile. Note that the built-in profile, **bluecoat-appliance-certificate**, cannot be edited.

Syntax

```
#(config) ssl
This changes the prompt to:
    #(config ssl)
    edit device-authentication-profile profile_name
This changes the prompt to:
    #(config ssl profile name)
```

Subcommands

```
#(config ssl profile_name) cipher-suite cipher-suite
    Configures device authentication profile cipher suites. If you press <enter>, you can see the list of
    available ciphers. The default is AES256-SHA. You can choose more than one cipher suite.

#(config ssl profile_name) ccl ccl_name
    Configures the device authentication profile CCL.

#(config ssl profile_name) device-id device_ID
    Configure device authentication profile of the specific device ID.

#(config ssl profile_name) exit
    Returns to the # (config ssl) prompt.

#(config ssl profile_name) keyring-id keyring_ID
    Configures the device authentication profile in the specified keyring.

#(config ssl profile_name) verify-peer {enable | disable}
    Enable or disable device authentication peer verification.

#(config ssl profile_name) view
```

For More Information

□ Volume 6: Advanced Networking

```
#(config device-auth test1) view
Name: test1
Keyring: appliance-key
CCL: appliance-ccl
Device-id: 4505060020 (4505060020)
Cipher suite: aes256-sha
Verify-peer: enabled
```

#(config ssl ssl__default_client_name)

Synopsis

Allows you to edit the SSL client parameters. Only the default is permitted.

Syntax

```
#(config) ssl
This changes the prompt to:
    #(config ssl)
    edit ssl-client ssl_default_client_name
This changes the prompt to:
    #(config ssl ssl default client name)
```

Subcommands

```
#(config ssl ssl_default_client_name) cipher-suite
Specifies the cipher suite to use. The default is to use all cipher suites. If you want to change the default,
you have two choices:
```

- interactive mode
- non-interactive mode

Director uses non-interactive commands in profiles and overlays to create cipher suites.

The optional <code>cipher-suite</code> refers to the cipher-suites you want to use, space separated, such as <code>rc4-md5</code> exp-des-cbc-sha. If you want to use the interactive mode, do not specify a cipher suite.

For More Information

□ Volume 3: Proxies and Proxy Services

```
SGOS#(config) ssl
SGOS#(config ssl) edit ssl-client ssl_default_client_name
SGOS#(config ssl ssl-client ssl_default_client_name) cipher-suite rc4-md5
exp-des-cbc-sha
ok
SGOS#(config ssl ssl-client ssl_default_client_name) exit
SGOS#(config ssl) exit
SGOS#(config)
```

#(config) static-routes

Synopsis

Use this command to set the network path to download the static routes configuration file.

To use static routes on the SG appliance, you must create a routing table and place it on an HTTP server accessible to the device. The routing table is a text file that contains a list of IP addresses, subnet masks, and gateways. When you download a routing table, the table is stored in the device until it is replaced by downloading a new table.

The routing table is a simple text file containing a list of IP addresses, subnet masks, and gateways. A sample routing table is illustrated below:

```
    10.63.0.0
    255.255.0.0
    10.63.158.213

    10.64.0.0
    255.255.0.0
    10.63.158.213

    10.65.0.0
    255.255.0.0
    10.63.158.226
```

When a routing table is loaded, all requested addresses are compared to the list, and routed based on the best match.

After the routing table is created, place it on an HTTP server so it can be downloaded to the device. To download the routing table to the SG appliance, use the load command.

Syntax

```
#(config) static-routes no path
    Clears the network path location of the static route table
#(config) static-routes path url
    Sets the network path location of the static route table to the specified URL.
```

For More Information

□ *Volume 3: Proxies and Proxy Services*

```
SGOS#(config) static-routes path 10.25.36.47/files/routes.txt ok
```

#(config) streaming #(config) streaming

#(config) streaming

Synopsis

Use this command to configure general streaming settings and Microsoft Windows Media or RealNetworks Real Media settings.

Syntax

```
#(config) streaming max-client-bandwidth kbps
   Sets the maximum client bandwidth permitted to kbps.
#(config) streaming max-gateway-bandwidth kbps
   Sets the maximum gateway bandwidth permitted to kbps.
#(config) streaming multicast address-range first address - last address
   The IP address range for the SG appliance's multicast-station. Default is from 224.2.128.0 and
   224.2.255.255.
#(config) streaming multicast port-range first port - last port
   Port range for the SG's multicast-station. Default is between 32768 and 65535.
#(config) streaming multicast ttl ttl
   Time to live value for the multicast-station on the SG appliance, expressed in hops. Default is 5; a valid
   number is between 1 and 255.
#(config) streaming no max-client-bandwidth
   Clears the current maximum client bandwidth setting.
#(config) streaming no max-gateway-bandwidth
   Clears the current maximum gateway bandwidth setting.
#(config) streaming quicktime http-handoff {disable | enable}
   Disables or enables QuickTime HTTP handoff.
#(config) streaming quicktime max-client-bandwidth kbps
   Sets the maximum connections allowed.
#(config) streaming quicktime max-connections number
   Sets the maximum client bandwidth allowed.
#(config) streaming quicktime max-gateway-bandwidth kbps
   Sets the maximum gateway bandwidth allowed.
#(config) streaming quicktime no {max-client-bandwidth | max-connections |
   max-gateway-bandwidth}
   Negates QuickTime parameters.
#(config) streaming real-media http-handoff {disable | enable}
   Disables or enables Real Media HTTP handoff.
#(config) streaming real-media log-forwarding {disable | enable}
   Sets Real Media client log forwarding.
#(config) streaming real-media max-client-bandwidth kbps
   Limits the total bandwidth used by all connected clients. Changing the setting to no
   max-client-bandwidth uses the maximum available bandwidth. Zero (0) is not an accepted value
#(config) streaming real-media max-connections number
   Limits the concurrent number of client connections. Changing the setting to no max-connections
```

uses the maximum available bandwidth. Zero (0) is not an accepted value.

Limits the total bandwidth used between the proxy and the gateway. Changing the setting to no max-gateway-bandwidth, uses the maximum available bandwidth. Zero (0) is not an accepted value.

#(config) streaming real-media max-gateway-bandwidth kbps

#(config) streaming #(config) streaming

```
#(config) streaming real-media multicast {disable | enable}
   Disables or enables Real Media client multicast support.
#(config) streaming real-media no {max-client-bandwidth | max-connections
   max-gateway-bandwidth | refresh-interval }
   Negates Real Media parameters.
#(config) streaming real-media refresh-interval hours
   Sets the streaming content refresh interval.
#(config) streaming windows-media asx-rewrite number in_addr cache_proto
    cache addr [cache-port]
   Provides proxy support for Windows Player 6.4.
   If your environment does not use a Layer 4 switch or WCCP, the SG appliance can operate as a proxy for
   Windows Media Player 6.4 clients by rewriting the .asx file (which links Web pages to Windows Media
    ASF files) to point to the Windows Media streaming media cache rather than the Windows Media server.
   number can be any positive number. It defines the priority of all the asx-rewrite rules. Smaller numbers
   indicate higher priority. in_addr specifies the hostname. It can have a maximum of one wildcard
   character. cache proto rewrites the protocol on the SG appliance and can take any of the following
   forms:
   mmsu (MMS-UDP)
   mmst (MMS-TCP)
   http (HTTP)
   mms (MMS-UDP or MMS-TCP)
   cache addr rewrites the address on the SG appliance.
#(config) streaming windows-media broadcast-alias alias url loops date time
   Enables scheduled live unicast or multicast transmission of video-on-demand content.
   alias must be unique. url specifies the address of the video-on-demand stream. loops specifies the
   number of times the stream should be played back. 0 means forever. date specifies the broadcast alias
   starting date. To specify multiple starting dates, enter the date as a comma-separated string. date can
   take any of the following formats:
   yyyy-mm-dd
   today
    time specifies the broadcast-alias starting time. To specify multiple starting times within the same date,
   enter the time as a comma-separated string. No spaces are permitted. time can take any of the following
   hh:mm
   midnight, 12am, 1am, 2am, 3am, 4am, 5am, 6am, 7am, 8am, 9am, 10am, 11am, noon,
   12pm, 1pm, 2pm, 3pm, 4pm, 5pm, 6pm, 7pm, 8pm, 9pm, 10pm, 11pm.
#(config) streaming windows-media http-handoff {disable | enable}
    Allows the Windows Media module to control the HTTP port when Windows Media streaming content
```

#(config) streaming windows-media live-retransmit {disable | enable}

Allows the SG appliance to retransmit dropped packets sent through MMS-UDP for unicast. The default is enabled.

is present. The default is enabled.

#(config) streaming #(config) streaming

- #(config) streaming windows-media log-compatibility {disable | enable}
 - Disables or enables access log compatibility. When log-compatibility is enabled, the SG appliance generates the MMS log the same way as Windows Media Server does. Three fields are affected when log-compatibility is enabled:
 - c-ip x-wm-c-ip (client address derived from client log)
 - c-dns x-wm-c-dns (client hostname derived from client log)
 - c-uri-stem cs-uri (use full URI instead of just the path)
- #(config) streaming windows-media log-forwarding {disable | enable} Enables or disables forwarding of the client log to the origin media server.
- #(config) streaming windows-media max-client-bandwidth kpbs Sets the maximum client bandwidth permitted to kbps.
- #(config) streaming windows-media max-connections number

 Limits the concurrent number of client connections. If this variable is set to 0, you effectively lock out all client connections to the SG appliance. To allow maximum client bandwidth, enter streaming windows-media no max-connections.
- #(config) streaming windows-media max-fast-bandwidth kpbs Sets the maximum fast start bandwidth per player.
- #(config) streaming windows-media max-gateway-bandwidth kpbs

 Sets the maximum limit, in kilobits per second (Kbps), for the amount of bandwidth Windows Media uses to send requests to its gateway. If this variable is set to 0, you effectively prevent the SG appliance from initiating any connections to the gateway. To allow maximum gateway bandwidth, enter streaming windows-media no max-gateway-bandwidth.
- #(config) streaming windows-media multicast-alias alias url [preload]

 Creates an alias on the SG appliance that reflects the multicast station on the origin content server.
- #(config) streaming windows-media multicast-station name {alias | url} ip port ttl
 Enables multicast transmission of Windows Media content from the SG appliance. name specifies the
 name of the alias. It must be unique. alias can be a unicast alias, a multicast-alias or a broadcast alias,
 as well as a url to a live stream source. ip is an optional parameter and specifies the multicast station's
 IP address. port specifies the multicast station's port value address. ttl specifies the multicast-station's
 time-to-live value, expressed in hops (and must be a valid number between 1 and 255). The default ttl
 is 5.
- #(config) streaming windows-media no asx-rewrite number
 Deletes the ASX rewrite rule associated with number.
- #(config) streaming windows-media no broadcast-alias alias
 Deletes the broadcast alias rule associated with alias.
- #(config) streaming windows-media no max-client-bandwidth Negates maximum client bandwidth settings.
- #(config) streaming windows-media no max-connections
 Negates maximum connections settings.
- #(config) streaming windows-media no max-gateway-bandwidth Negates maximum gateway bandwidth settings.
- #(config) streaming windows-media no multicast-alias alias
 Deletes the multicast alias rule associated with alias.
- #(config) streaming windows-media no multicast-station name
 Deletes the multicast station rule associated with name.
- #(config) streaming windows-media no refresh-interval Sets the current Windows Media refresh interval to "never refresh."

#(config) streaming #(config) streaming

- #(config) streaming windows-media no server-auth-type cache_ip_address

 Clears the authentication type associated with cache_ip_address.
- #(config) streaming windows-media no unicast-alias alias

Deletes the unicast alias rule associated with alias. The name of the alias, such as "welcome1" that is created on the SG appliance and reflects the content specified by the URL. The protocol is specified by the URL if the protocol is mmst, mmsu, or http. If the protocol is mms, the same protocol as the client is used.

- #(config) streaming windows-media refresh-interval hours
 - Checks the refresh interval for cached streaming content. *hours* must be a floating point number to specify refresh interval. 0 means always check for freshness.
- #(config) streaming windows-media server-auth-type {basic | ntlm} cache_ip_address
 Sets the authentication type of the SG appliance indicated by cache_ip_address to BASIC or NTLM.
- #(config) streaming windows-media server-thinning {disable | enable}
 Disables or enables server thinning.
- #(config) streaming windows-media unicast-alias alias url

Creates an alias on the SG appliance that reflects the content specified by the URL. When a client requests the alias content, the SG appliance uses the URL specified in the unicast-alias command to request the content from the origin streaming server.

For More Information

¬ *Volume 4: Web Communication Proxies*

```
SGOS#(config) streaming windows-media http-handoff enable ok

SGOS#(config) streaming windows-media live-retransmit disable ok

SGOS#(config) streaming windows-media log-forwarding disable ok

SGOS#(config) streaming windows-media max-connections 1600 ok

SGOS#(config) streaming windows-media no max-connections ok
```

#(config) top-ip #(config) top-ip

#(config) tcp-ip

Synopsis

Use the following commands to configure your TCP-IP settings.

Syntax

```
#(config) tcp-ip icmp-bcast-echo {disable | enable}
   Enables or disables ICMP broadcast echo responses.
#(config) tcp-ip icmp-tstamp-echo {disable | enable}
   Enables or disables ICMP timestamp echo responses.
#(config) tcp-ip ip-forwarding {disable | enable}
   Enables or disables IP-forwarding.
#(config) tcp-ip pmtu-discovery {disable | enable}
   Enables or disables Path MTU Discovery.
#(config) tcp-ip rfc-1323 {disable | enable}
   Enables or disables RFC-1323 support (satellite communications).
#(config) tcp-ip tcp-newreno {disable | enable}
   Enables or disables TCP NewReno support (improved fast recovery).
#(config) tcp-ip tcp-2msl seconds
   Specifies the time wait value for a TCP connection before completely closing.
#(config) tcp-ip tcp-loss-recovery-mode {aggressive | enhanced | normal}
   Helps to recover throughput efficiently after packet losses occur and also addresses performance
   problems due to a single packet loss during a large transfer over long delay pipes. The feature is disabled
   (set to normal) by default.
#(config) tcp-ip window-size window_size
   Specifies the TCP window size for satellite communications.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) tcp-ip ip-forwarding enable ok
SGOS#(config) tcp-ip rfc-1323 enable ok
```

#(config) tcp-rtt

#(config) tcp-rtt

Synopsis

Use this command to configure the number of TCP round trip time ticks.

Syntax

```
#(config) tcp-rtt num_500ms_ticks
Indicates the default TCP Round Trip Time in ticks.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) tcp-rtt 500 ok
```

#(config) tcp-rtt-use #(config) tcp-rtt-use

#(config) tcp-rtt-use

Synopsis

Use this command to enable or disable the default TCP Round Trip Time.

Syntax

```
#(config) tcp-rtt-use {disable | enable}
Disables or enables using fixed RTT.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) tcp-rtt-use enable
  ok
```

#(config) timezone #(config) timezone

#(config) timezone

Synopsis

Use this command to set the local time zone on the SG appliance.

Syntax

```
#(config) timezone timezone_number
Enables you to set the local time zone. (Use (config) show timezones to display a list of supported timezones.)
```

For More Information

```
□ Volume 2: Getting Started
```

```
□ #(config) clock on page 128
```

```
SGOS#(config) timezone 3 ok
```

#(config) upgrade-path

Synopsis

Use this command to specify the network path to download system software.

Syntax

```
\# (config) upgrade-path url Indicates the network path to use to download SG system software.
```

```
SGOS#(config) upgrade-path 10.25.36.47 ok
```

#(config) virtual-ip #(config) virtual-ip

#(config) virtual-ip

Synopsis

This command allows you to configure virtual IP addresses.

Syntax

```
#(config) virtual-ip address ip_address
    Specifies the virtual IP to add.
#(config) virtual-ip clear
    Removes all virtual IP addresses.
#(config) virtual-ip no address ip_address
    Removes the specified virtual IP from the list.
```

For More Information

- □ Volume 6: Advanced Networking
- # (config) failover on page 182

```
SGOS#(config) virtual-ip address 10.25.36.47 ok
```

#(config) wccp #(config) wccp

#(config) wccp

Synopsis

The SG appliance can be configured to participate in a WCCP (Web Cache Control Protocol) scheme, where a WCCP-capable router collaborates with a set of WCCP-configured SG appliance to service requests. WCCP is a Cisco-developed protocol. For more information about WCCP, refer to *Volume 6: Advanced Networking*.

After you have created the WCCP configuration file, place the file on an HTTP server so it can be downloaded to the SG appliance. To download the WCCP configuration to the SG appliance, use the load command.

Syntax

```
#(config) wccp disable
Disables WCCP.

#(config) wccp enable
Enables WCCP.

#(config) wccp no path
Negates certain WCCP settings.

#(config) wccp path url
Specifies the network path from which to download WCCP settings.
```

For More Information

□ Volume 6: Advanced Networking

```
SGOS#(config) wccp path 10.25.36.47/files/wccp.txt ok
```

#(config) wccp