



CHAPTER 13

gateway through hw-module module shutdown Commands

gateway

To specify which group of call agents are managing a particular gateway, use the **gateway** command in MGCP map configuration mode. To remove the configuration, use the **no** form of this command.

gateway *ip_address* [*group_id*]

Syntax Description

gateway	Specifies the group of call agents that are managing a particular gateway
<i>ip_address</i>	The IP address of the gateway.
<i>group_id</i>	The ID of the call agent group, from 0 to 2147483647.

Defaults

This command is disabled by default.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
MGCP map configuration	•	•	•	•	—

Command History

Release	Modification
7.0(1)	This command was introduced.

Usage Guidelines

Use the **gateway** command to specify which group of call agents are managing a particular gateway. The IP address of the gateway is specified with the *ip_address* option. The *group_id* option is a number from 0 to 4294967295 that must correspond with the *group_id* of the call agents that are managing the gateway. A gateway may only belong to one group.

Examples

The following example allows call agents 10.10.11.5 and 10.10.11.6 to control gateway 10.10.10.115, and allows call agents 10.10.11.7 and 10.10.11.8 to control both gateways 10.10.10.116 and 10.10.10.117:

```
hostname(config)# mgcp-map mgcp_policy
hostname(config-mgcp-map)# call-agent 10.10.11.5 101
hostname(config-mgcp-map)# call-agent 10.10.11.6 101
hostname(config-mgcp-map)# call-agent 10.10.11.7 102
hostname(config-mgcp-map)# call-agent 10.10.11.8 102
hostname(config-mgcp-map)# gateway 10.10.10.115 101
hostname(config-mgcp-map)# gateway 10.10.10.116 102
hostname(config-mgcp-map)# gateway 10.10.10.117 102
```

Related Commands

Commands	Description
debug mgcp	Enables the display of debug information for MGCP.
mgcp-map	Defines an MGCP map and enables MGCP map configuration mode.
show mgcp	Displays MGCP configuration and session information.

global

To create a pool of mapped addresses for NAT, use the **global** command in global configuration mode. To remove the pool of addresses, use the **no** form of this command.

global (*mapped_ifc*) *nat_id* {*mapped_ip*[-*mapped_ip*] [**netmask** *mask*] | **interface**}

no global (*mapped_ifc*) *nat_id* {*mapped_ip*[-*mapped_ip*] [**netmask** *mask*] | **interface**}

Syntax Description

interface	Uses the interface IP address as the mapped address. Use this keyword if you want to use the interface address, but the address is dynamically assigned using DHCP.
<i>mapped_ifc</i>	Specifies the name of the interface connected to the mapped IP address network.
<i>mapped_ip</i> [- <i>mapped_ip</i>]	Specifies the mapped address(es) to which you want to translate the real addresses when they exit the mapped interface. If you specify a single address, then you configure PAT. If you specify a range of addresses, then you configure dynamic NAT. If the external network is connected to the Internet, each global IP address must be registered with the Network Information Center (NIC).
<i>nat_id</i>	Specifies an integer for the NAT ID. This ID is referenced by the nat command to associate a mapped pool with the real addresses to translate. For regular NAT, this integer is between 1 and 2147483647. For policy NAT (nat id access-list), this integer is between 1 and 65535. Do not specify a global command for NAT ID 0; 0 is reserved for identity NAT and NAT exemption, which do not use a global command.
netmask <i>mask</i>	(Optional) Specifies the network mask for the <i>mapped_ip</i> . This mask does not specify a network when paired with the <i>mapped_ip</i> ; rather, it specifies the subnet mask assigned to the <i>mapped_ip</i> when it is assigned to a host. If you want to configure a range of addresses, you need to specify <i>mapped_ip-mapped_ip</i> . If you do not specify a mask, then the default mask for the address class is used.

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Global configuration	•	•	•	•	—

Command History

Release	Modification
8.0(2)	NAT is now supported in transparent firewall mode.

Usage Guidelines

For dynamic NAT and PAT, you first configure a **nat** command identifying the real addresses on a given interface that you want to translate. Then you configure a separate **global** command to specify the mapped addresses when exiting another interface (in the case of PAT, this is one address). Each **nat** command matches a **global** command by comparing the NAT ID, a number that you assign to each command.

See the **nat** command for more information about dynamic NAT and PAT.

If you change the NAT configuration, and you do not want to wait for existing translations to time out before the new NAT information is used, you can clear the translation table using **clear xlate** command. However, clearing the translation table disconnects all of the current connections.

Examples

For example, to translate the 10.1.1.0/24 network on the inside interface, enter the following command:

```
hostname(config)# nat (inside) 1 10.1.1.0 255.255.255.0
hostname(config)# global (outside) 1 209.165.201.1-209.165.201.30
```

To identify a pool of addresses for dynamic NAT as well as a PAT address for when the NAT pool is exhausted, enter the following commands:

```
hostname(config)# nat (inside) 1 10.1.1.0 255.255.255.0
hostname(config)# global (outside) 1 209.165.201.5
hostname(config)# global (outside) 1 209.165.201.10-209.165.201.20
```

To translate the lower security dmz network addresses so they appear to be on the same network as the inside network (10.1.1.0), for example, to simplify routing, enter the following commands:

```
hostname(config)# nat (dmz) 1 10.1.2.0 255.255.255.0 outside dns
hostname(config)# global (inside) 1 10.1.1.45
```

To identify a single real address with two different destination addresses using policy NAT, enter the following commands:

```
hostname(config)# access-list NET1 permit ip 10.1.2.0 255.255.255.0 209.165.201.0
255.255.255.224
hostname(config)# access-list NET2 permit ip 10.1.2.0 255.255.255.0 209.165.200.224
255.255.255.224
hostname(config)# nat (inside) 1 access-list NET1 tcp 0 2000 udp 10000
hostname(config)# global (outside) 1 209.165.202.129
hostname(config)# nat (inside) 2 access-list NET2 tcp 1000 500 udp 2000
hostname(config)# global (outside) 2 209.165.202.130
```

To identify a single real address/destination address pair that use different ports using policy NAT, enter the following commands:

```
hostname(config)# access-list WEB permit tcp 10.1.2.0 255.255.255.0 209.165.201.11
255.255.255.255 eq 80
hostname(config)# access-list TELNET permit tcp 10.1.2.0 255.255.255.0 209.165.201.11
255.255.255.255 eq 23
hostname(config)# nat (inside) 1 access-list WEB
hostname(config)# global (outside) 1 209.165.202.129
hostname(config)# nat (inside) 2 access-list TELNET
hostname(config)# global (outside) 2 209.165.202.130
```

Related Commands

Command	Description
clear configure global	Removes global commands from the configuration.
nat	Specifies the real addresses to translate.
show running-config global	Displays the global commands in the configuration.
static	Configures a one-to-one translation.

group-alias

To create one or more alternate names by which the user can refer to a tunnel-group, use the **group-alias** command in tunnel-group webvpn configuration mode. To remove an alias from the list, use the **no** form of this command.

group-alias *name* [**enable** | **disable**]

no group-alias *name*

Syntax Description

disable	Disables the group alias.
enable	Enables a previously disabled group alias.
<i>name</i>	Specifies the name of a tunnel group alias. This can be any string you choose, except that the string cannot contain spaces.

Defaults

No default group alias, but if you do specify a group alias, that alias is enabled by default.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Tunnel-group webvpn configuration	•	—	•	—	—

Command History

Release	Modification
7.1(1)	This command was introduced.

Usage Guidelines

The group alias that you specify here appears in the drop-down list on the login page. Each group can have multiple aliases or no alias. This command is useful when the same group is known by several common names, such as “Devtest” and “QA”.

Examples

The following example shows the commands for configuring the webvpn tunnel group named “devtest” and establishing the aliases “QA” and “Fra-QA” for the group:

```
hostname(config)# tunnel-group devtest type webvpn
hostname(config)# tunnel-group devtest webvpn-attributes
hostname(config-tunnel-webvpn)# group-alias QA
hostname(config-tunnel-webvpn)# group-alias Fra-QA
hostname(config-tunnel-webvpn)#
```

Related Commands	Command	Description
	clear configure tunnel-group	Clears the entire tunnel-group database or the named tunnel group configuration.
	show webvpn group-alias	Displays the aliases for the specified tunnel group or for all tunnel groups.
	tunnel-group webvpn-attributes	Enters the tunnel-group webvpn configuration mode for configuring WebVPN tunnel-group attributes.

group-delimiter

To enable group-name parsing and specify the delimiter to be used when parsing group names from the user names that are received when tunnels are being negotiated, use the **group-delimiter** command in global configuration mode. To disable this group-name parsing, use the **no** form of this command.

group-delimiter *delimiter*

no group-delimiter

Syntax Description

delimiter Specifies the character to use as the group-name delimiter.
Valid values are: @, #, and !.

Defaults

By default, no delimiter is specified, disabling group-name parsing.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Global configuration	•	—	•	—	—

Command History

Release	Modification
7.0(1)	This command was introduced.

Usage Guidelines

The delimiter is used to parse tunnel group names from user names when tunnels are negotiated. By default, no delimiter is specified, disabling group-name parsing.

Examples

This example shows the **group-delimiter** command to change the group delimiter to the hash mark (#):

```
hostname(config)# group-delimiter #
```

Related Commands

Command	Description
clear configure group-delimiter	Clears the configured group delimiter.
show running-config group-delimiter	Displays the current group-delimiter value.
strip-group	Enables or disables strip-group processing.

group-lock

To restrict remote users to access through the tunnel group only, issue the **group-lock** command in group-policy configuration mode or username configuration mode.

To remove the **group-lock** attribute from the running configuration, use the **no** form of this command. This option allows inheritance of a value from another group policy.

group-lock {**value** *tunnel-grp-name* | **none**}

no group-lock

Syntax Description

none	Sets group-lock to a null value, thereby allowing no group-lock restriction. Prevents inheriting a group-lock value from a default or specified group policy.
value <i>tunnel-grp-name</i>	Specifies the name of an existing tunnel group that the security appliance requires for the user to connect.

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Group-policyconfiguration	•	—	•	—	—
Username configuration	•	—	•	—	—

Usage Guidelines

To disable group-lock, use the **group-lock none** command.

Group-lock restricts users by checking if the group configured in the VPN Client is the same as the tunnel group to which the user is assigned. If it is not, the security appliance prevents the user from connecting. If you do not configure group-lock, the security appliance authenticates users without regard to the assigned group.

Command History

Release	Modification
7.0(1)	This command was introduced.

Examples

The following example shows how to set group lock for the group policy named FirstGroup:

```
hostname(config)# group-policy FirstGroup attributes
hostname(config-group-policy)# group-lock value tunnel group name
```

group-object

To add network object groups, use the **group-object** command in protocol, network, service, and icmp-type configuration modes. To remove network object groups, use the **no** form of this command.

group-object *obj_grp_id*

no group-object *obj_grp_id*

Syntax Description

obj_grp_id Identifies the object group (one to 64 characters) and can be any combination of letters, digits, and the “_”, “-”, “.” characters.

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Protocol, network, service, icmp-type configuration	•	•	•	•	—

Command History

Release	Modification
Preexisting	This command was preexisting.

Usage Guidelines

The **group-object** command is used with the **object-group** command to define an object that itself is an object group. It is used in protocol, network, service, and icmp-type configuration modes. This sub-command allows logical grouping of the same type of objects and construction of hierarchical object groups for structured configuration.

Duplicate objects are allowed in an object group if they are group objects. For example, if object 1 is in both group A and group B, it is allowed to define a group C which includes both A and B. It is not allowed, however, to include a group object which causes the group hierarchy to become circular. For example, it is not allowed to have group A include group B and then also have group B include group A.

The maximum allowed levels of a hierarchical object group is 10.



Note

The security appliance does not support IPv6 nested object groups, so you cannot use the **group-object** command for an object with IPv6 entities in it under another IPv6 object-group.

Examples

The following example shows how to use the **group-object** command in network configuration mode eliminate the need to duplicate hosts:

```
hostname(config)# object-group network host_grp_1
hostname(config-network)# network-object host 192.168.1.1
hostname(config-network)# network-object host 192.168.1.2
hostname(config-network)# exit
hostname(config)# object-group network host_grp_2
hostname(config-network)# network-object host 172.23.56.1
hostname(config-network)# network-object host 172.23.56.2
hostname(config-network)# exit
hostname(config)# object-group network all_hosts
hostname(config-network)# group-object host_grp_1
hostname(config-network)# group-object host_grp_2
hostname(config-network)# exit
hostname(config)# access-list grp_1 permit tcp object-group host_grp_1 any eq ftp
hostname(config)# access-list grp_2 permit tcp object-group host_grp_2 any eq smtp
hostname(config)# access-list all permit tcp object-group all-hosts any eq w
```

Related Commands

Command	Description
clear configure object-group	Removes all the object-group commands from the configuration.
network-object	Adds a network object to a network object group.
object-group	Defines object groups to optimize your configuration.
port-object	Adds a port object to a service object group.
show running-config object-group	Displays the current object groups.

group-policy

To create or edit a group policy, use the **group-policy** command in global configuration mode. To remove a group policy from the configuration, use the **no** form of this command.

group-policy *name* {**internal** [**from** *group-policy_name*] | **external server-group** *server_group* **password** *server_password*}

no group-policy *name*

Syntax Description

external server-group <i>server_group</i>	Specifies the group policy as external and identifies the AAA server group for the security appliance to query for attributes.
from <i>group-policy_name</i>	Initializes the attributes of this internal group policy to the values of a pre-existing group policy.
internal	Identifies the group policy as internal.
<i>name</i>	Specifies the name of the group policy. The name can be up to 64 characters long and cannot contain spaces.
password <i>server_password</i>	Provides the password to use when retrieving attributes from the external AAA server group. The password can be up to 128 characters long and cannot contain spaces.

Defaults

No default behavior or values. See Usage Guidelines.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Global configuration	•	—	•	—	—

Command History

Release	Modification
7.0.1	This command was introduced.

Usage Guidelines

A default group policy, named “DefaultGroupPolicy,” always exists on the security appliance. However, this default group policy does not take effect unless you configure the security appliance to use it. For configuration instructions, see the *Cisco Security Appliance Command Line Configuration Guide*.

Use the **group-policy attributes** command to enter config-group-policy mode, in which you can configure any of the group-policy Attribute-Value Pairs. The DefaultGroupPolicy has these Attribute-Value Pairs:

Attribute	Default Value
backup-servers	keep-client-config
banner	none
client-access-rules	none
client-firewall	none
default-domain	none
dns-server	none
group-lock	none
ip-comp	disable
ip-phone-bypass	disabled
ipsec-udp	disabled
ipsec-udp-port	10000
leap-bypass	disabled
nem	disabled
password-storage	disabled
pfs	disable
re-xauth	disable
secure-unit-authentication	disabled
split-dns	none
split-tunnel-network-list	none
split-tunnel-policy	tunnelall
user-authentication	disabled
user-authentication-idle-timeout	none
vpn-access-hours	unrestricted
vpn-filter	none
vpn-idle-timeout	30 minutes
vpn-session-timeout	none
vpn-simultaneous-logins	3
vpn-tunnel-protocol	IPSec WebVPN
wins-server	none

In addition, you can configure webvpn-mode attributes for the group policy, either by entering the **webvpn** command in config-group-policy mode or by entering the **group-policy attributes** command and then entering the **webvpn** command in config-group-webvpn mode. See the description of the **group-policy attributes** command for details.

Examples

The following example shows how to create an internal group policy with the name “FirstGroup”:

```
hostname(config)# group-policy FirstGroup internal
```

The next example shows how to create an external group policy with the name “ExternalGroup,” the AAA server group “BostonAAA,” and the password “12345678”:

```
hostname(config)# group-policy ExternalGroup external server-group BostonAAA password
12345678
```

Related Commands	Command	Description
	clear configure group-policy	Removes the configuration for a particular group policy or for all group policies.
	group-policy attributes	Enters config-group-policy mode, which lets you configure attributes and values for a specified group policy or lets you enter webvpn mode to configure webvpn attributes for the group.
	show running-config group-policy	Displays the running configuration for a particular group policy or for all group policies.
	webvpn	Enters config-group-webvpn mode, in which you can configure the WebVPN attributes for the specified group.

group-policy attributes

To enter the config-group-policy mode, use the **group-policy attributes** command in global configuration mode. To remove all attributes from a group policy, use the **no** version of this command. In config-group-policy mode, you can configure Attribute-Value Pairs for a specified group policy or enter group-policy webvpn configuration mode to configure webvpn attributes for the group.

group-policy *name* **attributes**

no **group-policy** *name* **attributes**

Syntax Description

name Specifies the name of the group policy.

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple Context	System
Global configuration	•	—	•	—	—

Command History

Release	Modification
7.0.1	This command was introduced.

Usage Guidelines

The syntax of the commands in attributes mode have the following characteristics in common:

- The **no** form removes the attribute from the running configuration, and enables inheritance of a value from another group policy.
- The **none** keyword sets the attribute in the running configuration to a null value, thereby preventing inheritance.
- Boolean attributes have explicit syntax for enabled and disabled settings.

A default group policy, named DefaultGroupPolicy, always exists on the security appliance. However, this default group policy does not take effect unless you configure the security appliance to use it. For configuration instructions, see the *Cisco Security Appliance Command Line Configuration Guide*.

The **group-policy attributes** command enters config-group-policy mode, in which you can configure any of the group-policy Attribute-Value Pairs. The DefaultGroupPolicy has these Attribute-Value Pairs:

Attribute	Default Value
backup-servers	keep-client-config
banner	none

Attribute	Default Value
client-access-rule	none
client-firewall	none
default-domain	none
dns-server	none
group-lock	none
ip-comp	disable
ip-phone-bypass	disabled
ipsec-udp	disabled
ipsec-udp-port	10000
leap-bypass	disabled
nem	disabled
password-storage	disabled
pfs	disable
re-xauth	disable
secure-unit-authentication	disabled
split-dns	none
split-tunnel-network-list	none
split-tunnel-policy	tunnelall
user-authentication	disabled
user-authentication-idle-timeout	none
vpn-access-hours	unrestricted
vpn-filter	none
vpn-idle-timeout	30 minutes
vpn-session-timeout	none
vpn-simultaneous-logins	3
vpn-tunnel-protocol	IPSec WebVPN
wins-server	none

In addition, you can configure webvpn-mode attributes for the group policy, by entering the **group-policy attributes** command and then entering the **webvpn** command in config-group-policy mode. See the description of the **webvpn** command (group-policy attributes and username attributes modes) for details.

Examples

The following example shows how to enter group-policy attributes mode for the group policy named FirstGroup:

```
hostname(config)# group-policy FirstGroup attributes
hostname(config-group-policy)#
```

Related Commands

Command	Description
clear configure group-policy	Removes the configuration for a particular group policy or for all group policies.
group-policy	Creates, edits, or removes a group policy.
show running-config group-policy	Displays the running configuration for a particular group policy or for all group policies.
webvpn (group-policy attributes mode)	Enters config-group-webvpn mode, in which you can configure the WebVPN attributes for the specified group.

group-prompt

To customize the group prompt of the WebVPN page login box that is displayed to WebVPN users when they connect to the security appliance, use the **group-prompt** command in webvpn customization configuration mode. To remove the command from the configuration and cause the value to be inherited, use the **no** form of this command.

group-prompt {text | style} *value*

no group-prompt {text | style} *value*

Syntax Description

text	Specifies you are changing the text.
style	Specifies you are changing the style.
<i>value</i>	The actual text to display (maximum 256 characters), or Cascading Style Sheet (CSS) parameters (maximum 256 characters).

Defaults

The default text of the group prompt is “GROUP:”.

The default style of the group prompt is color:black;font-weight:bold;text-align:right.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Webvpn customization configuration	•	—	•	—	—

Command History

Release	Modification
7.1(1)	This command was introduced.

Usage Guidelines

The **style** option is expressed as any valid Cascading Style Sheet (CSS) parameters. Describing these parameters is beyond the scope of this document. For more information about CSS parameters, consult CSS specifications at the World Wide Web Consortium (W3C) website at www.w3.org. Appendix F of the CSS 2.1 Specification contains a convenient list of CSS parameters, and is available at www.w3.org/TR/CSS21/propidx.html.

Here are some tips for making the most common changes to the WebVPN pages—the page colors:

- You can use a comma-separated RGB value, an HTML color value, or the name of the color if recognized in HTML.
- RGB format is 0,0,0, a range of decimal numbers from 0 to 255 for each color (red, green, blue); the comma separated entry indicates the level of intensity of each color to combine with the others.

- HTML format is #000000, six digits in hexadecimal format; the first and second represent red, the third and fourth green, and the fifth and sixth represent blue.

**Note**

To easily customize the WebVPN pages, we recommend that you use ASDM, which has convenient features for configuring style elements, including color swatches and preview capabilities.

Examples

In the following example, the text is changed to “Corporate Group:”, and the default style is changed with the font weight increased to bolder:

```
F1-asal(config)# webvpn
F1-asal(config-webvpn)# customization cisco
F1-asal(config-webvpn-custom)# group-prompt text Corporate Group:
F1-asal(config-webvpn-custom)# group-prompt style font-weight:bolder
```

Related Commands

Command	Description
password-prompt	Customizes the password prompt of the WebVPN page.
username-prompt	Customizes the username prompt of the WebVPN page.

group-search-timeout

To specify the maximum time to wait for a response from an Active Directory server queried using the **show ad-groups** command, use the **group-search-timeout** command in AAA server host configuration mode. To remove the command from the configuration, use the **no** form of the command:

group-search-timeout *seconds*

no group-search-timeout *seconds*

Syntax Description

seconds The time to wait for a response from the Active Directory server, from 1 to 300 seconds.

Defaults

The default is 10 seconds.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
aaa-server host configuration	•	—	•	—	—

Command History

Release	Modification
8.0(4)	This command is introduced.

Usage Guidelines

The **show ad-groups** command applies only to Active Directory servers using LDAP, and displays groups that are listed on an Active Directory server. Use the **group-search-timeout** command to adjust the time to wait for a response from the server.

Examples

The following example sets the timeout to 20 seconds:

```
hostname(config-aaa-server-host)#group-search-timeout 20
```

Related Commands

Command	Description
ldap-group-base-dn	Specifies a level in the Active Directory hierarchy where the server begins searching for groups that are used by dynamic group policies.
show ad-groups	Displays groups that are listed on an Active Directory server.

group-url

To specify incoming URLs or IP addresses for the group, use the **group-url** command in tunnel-group webvpn configuration mode. To remove a URL from the list, use the **no** form of this command.

group-url *url* [**enable** | **disable**]

no group-url *url*

Syntax Description

disable	Disables the URL, but does not remove it from the list.
enable	Enables the URL.
<i>url</i>	Specifies a URL or IP address for this tunnel group.

Defaults

There is no default URL or IP address, but if you do specify a URL or IP address, it is enabled by default.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Tunnel-group webvpn configuration	•	—	•	—	—

Command History

Release	Modification
7.1(1)	This command was introduced.

Usage Guidelines

Specifying a group URL or IP address eliminates the need for the user to select a group at login. When a user logs in, the security appliance looks for the user's incoming URL/address in the tunnel-group-policy table. If it finds the URL/address and if group-url is enabled in the tunnel group, then the security appliance automatically selects the associated tunnel group and presents the user with only the username and password fields in the login window. This simplifies the user interface and has the added advantage of never exposing the list of groups to the user. The login window that the user sees uses the customizations configured for that tunnel group.

If the URL/address is disabled and group-alias is configured, then the dropdown list of groups is also displayed, and the user must make a selection.

You can configure multiple URLs/addresses (or none) for a group. Each URL/address can be enabled or disabled individually. You must use a separate **group-url** command for each URL/address specified. You must specify the entire URL/address, including either the http or https protocol.

You cannot associate the same URL/address with multiple groups. The security appliance verifies the uniqueness of the URL/address before accepting the URL/address for a tunnel group.

The following example shows the commands for configuring the webvpn tunnel group named “test” and establishing two group URLs, “http://www.cisco.com” and “https://supplier.com” for the group:

```
hostname(config)# tunnel-group test type webvpn
hostname(config)# tunnel-group test webvpn-attributes
hostname(config-tunnel-webvpn)# group-url http://www.cisco.com
hostname(config-tunnel-webvpn)# group-url https://supplier.company.com
hostname(config-tunnel-webvpn)#
```

The following example enables the group URLs http://www.cisco.com and http://192.168.10.10 for the tunnel-group named RadiusServer:

```
hostname(config)# tunnel-group RadiusServer type webvpn
hostname(config)# tunnel-group RadiusServer general-attributes
hostname(config-tunnel-general)# authentication server-group RADIUS
hostname(config-tunnel-general)# accounting-server-group RADIUS
hostname(config-tunnel-general)# tunnel-group RadiusServer webvpn-attributes
hostname(config-tunnel-webvpn)# group-alias "Cisco Remote Access" enable
hostname(config-tunnel-webvpn)# group-url http://www.cisco.com enable
hostname(config-tunnel-webvpn)# group-url http://192.168.10.10 enable
hostname(config-tunnel-webvpn)#
```

Related Commands

Command	Description
clear configure tunnel-group	Clears the entire tunnel-group database or the named tunnel group configuration.
show webvpn group-url	Displays the URLs for the specified tunnel group or for all tunnel groups.
tunnel-group webvpn-attributes	Enters the config-webvpn mode for configuring WebVPN tunnel-group attributes.

h245-tunnel-block

To block H.245 tunneling in H.323, use the **h245-tunnel-block** command in parameters configuration mode. To disable this feature, use the **no** form of this command.

h245-tunnel-block action [drop-connection | log]

no h245-tunnel-block action [drop-connection | log]

Syntax Description

drop-connection	Drops the call setup connection when H.245 tunnel is detected.
log	Issues a log when H.245 tunnel is detected.

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Parameters configuration	•	•	•	•	—

Command History

Release	Modification
7.2(1)	This command was introduced.

Examples

The following example shows how to block H.245 tunneling on an H.323 call:

```
hostname(config)# policy-map type inspect h323 h323_map
hostname(config-pmap)# parameters
hostname(config-pmap-p)# h245-tunnel-block action drop-connection
```

Related Commands

Command	Description
class	Identifies a class map name in the policy map.
class-map type inspect	Creates an inspection class map to match traffic specific to an application.
policy-map	Creates a Layer 3/4 policy map.
show running-config policy-map	Display all current policy map configurations.

hello-interval

To specify the interval between EIGRP hello packets sent on an interface, use the **hello-interval** command in interface configuration mode. To return the hello interval to the default value, use the **no** form of this command.

hello-interval eigrp *as-number seconds*

no hello-interval eigrp *as-number seconds*

Syntax Description

<i>as-number</i>	The autonomous system number of the EIGRP routing process.
<i>seconds</i>	Specifies the interval between hello packets that are sent on the interface; valid values are from 1 to 65535 seconds.

Defaults

The default *seconds* is 5 seconds.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Interface configuration	•	—	•	—	—

Command History

Release	Modification
8.0(2)	This command was introduced.

Usage Guidelines

The smaller the hello interval, the faster topological changes will be detected, but more routing traffic will ensue. This value must be the same for all routers and access servers on a specific network.

Examples

The following example sets the EIGRP hello interval to 10 seconds and the hold time to 30 seconds:

```
hostname(config-if)# hello-interval eigrp 100 10
hostname(config-if)# hold-time eigrp 100 30
```

Related Commands

Command	Description
hold-time	Configures the EIGRP hold time advertised in hello packets.

help

To display help information for the command specified, use the **help** command in user EXEC mode.

help {*command* | ?}

Syntax Description

<i>command</i>	Specifies the command for which to display the CLI help.
?	Displays all commands that are available in the current privilege level and mode.

Defaults

No default behaviors or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
User EXEC	•	•	•	•	•

Command History

Release	Modification
Preexisting	This command was preexisting.

Usage Guidelines

The **help** command displays help information about all commands. You can see help for an individual command by entering the **help** command followed by the command name. If you do not specify a command name and enter ? instead, all commands that are available in the current privilege level and mode display.

If you enable the **pager** command and when 24 lines display, the listing pauses, and the following prompt appears:

```
<--- More --->
```

The More prompt uses syntax similar to the UNIX **more** command as follows:

- To see another screen of text, press the **Space** bar.
- To see the next line, press the **Enter** key.
- To return to the command line, press the **q** key.

Examples

The following example shows how to display help for the **rename** command:

```
hostname# help rename
```

```
USAGE:
```

```
rename /noconfirm [{disk0:|disk1:|flash:}] <source path> [{disk0:|disk1:
```

```
|flash:}} <destination path>
```

DESCRIPTION:

```
rename          Rename a file
```

SYNTAX:

```
/noconfirm          No confirmation
{disk0:|disk1:|flash:} Optional parameter that specifies the filesystem
<source path>       Source file path
<destination path>  Destination file path
```

```
hostname#
```

The following examples shows how to display help by entering the command name and a question mark:

```
hostname(config)# enable ?
usage: enable password <pwd> [encrypted]
```

Help is available for the core commands (not the **show**, **no**, or **clear** commands) by entering **?** at the command prompt:

```
hostname(config)# ?
aaa          Enable, disable, or view TACACS+ or RADIUS
             user authentication, authorization and accounting
...
```

Related Commands

Command	Description
show version	Displays information about the operating system software.

hic-fail-group-policy

To specify a group policy to grant a WebVPN user access rights that are different from the default group policy, use the **hic-fail-group-policy** command in tunnel-group-webvpn configuration mode. The **no** form of this command sets the group policy to the default group policy.

hic-fail-group-policy *name*

no hic-fail-group-policy

Syntax Description

name Specifies the name of the group policy.

Defaults

DfltGrpPolicy

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple Context	System
Tunnel-group-webvpn configuration	•	—	•	—	—

Command History

Release	Modification
7.1(1)	This command was introduced.

Usage Guidelines

This command is valid only for security appliances with Cisco Secure Desktop installed. Host integrity checking, also called *System Detection*, involves checking the remote PC for a minimal set of criteria that must be satisfied to apply a VPN feature policy. The security appliance uses the value of the hic-fail-group-policy attribute to limit access rights to remote CSD users as follows:

- Always uses it if you set the VPN feature policy to “Use Failure Group-Policy.”
- Uses it if you set the VPN feature policy to “Use Success Group-Policy, if criteria match” and the criteria then fail to match.

This attribute specifies the name of the failure group policy to be applied. Use a group policy to differentiate access rights from those associated with the default group policy.



Note

The security appliance does not use this attribute if you set the VPN feature policy to “Always use Success Group-Policy.”

For more information, see the *Cisco Secure Desktop Configuration Guide for Cisco ASA 5500 Series Administrators*.

Examples

The following example creates a WebVPN tunnel group named “FirstGroup” and specifies the failure group policy with the name “group2”:

```
hostname(config)# tunnel-group FirstGroup webvpn
hostname(config)# tunnel-group FirstGroup webvpn-attributes
hostname(config-tunnel-webvpn)# hic-fail-group-policy group2
hostname(config-tunnel-webvpn)#
```

Related Commands

Command	Description
clear configure group-policy	Removes the configuration for a particular group policy or for all group policies.
show running-config group-policy	Displays the running configuration for a particular group policy or for all group policies.
tunnel-group webvpn-attributes	Specifies the WebVPN attributes for the named tunnel-group.

hidden-parameter

To specify hidden parameters in the HTTP POST request that the security appliance submits to the authenticating web server for SSO authentication, use the **hidden-parameter** command in aaa-server-host configuration mode. To remove all hidden parameters from the running configuration, use the **no** form of this command.

hidden-parameter *string*

no hidden-parameter



Note

To configure SSO with the HTTP protocol correctly, you must have a thorough working knowledge of authentication and HTTP protocol exchanges.

Syntax Description

<i>string</i>	A hidden parameter embedded in the form and sent to the SSO server. You can enter it on multiple lines. The maximum number of characters for each line is 255. The maximum number of characters for all lines together—the complete hidden parameter—is 2048.
---------------	---

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple Context	System
Aaa-server-host configuration	•	—	•	—	—

Command History

Release	Modification
7.1(1)	This command was introduced.

Usage Guidelines

This is an SSO with HTTP Forms command.

The WebVPN server of the security appliance uses an HTTP POST request to submit a single sign-on authentication request to an authenticating web server. That request may require specific hidden parameters from the SSO HTML form—other than username and password—that are not visible to the user. You can discover hidden parameters that the web server expects in the POST request by using a HTTP header analyzer on a form received from the web server.

The command **hidden-parameter** lets you specify a hidden parameter the web server requires in the authentication POST request. If you use a header analyzer, you can copy and paste the whole hidden parameter string including any encoded URL parameters.

For ease of entry, you can enter a hidden parameter on multiple, sequential lines. The security appliance then concatenates the lines into a single hidden parameter. While the maximum characters per hidden-parameter line is 255 characters, you can enter fewer characters on each line.

**Note**

Any question mark in the string must be preceded by a CTRL-v escape sequence.

Examples

The following example shows a hidden parameter comprised of four form entries and their values, separated by &. Excerpted from the POST request, the four entries and their values are:

- SMENC with a value of ISO-8859-1
- SMLOCALE with a value of US-EN
- target with a value of https%3A%2F%2Ftools.cisco.com%2Femco%2Fappdir%2FAreaRoot.do%3FEMCOPageCode%3DENG
- smauthreason with a value of 0

SMENC=ISO-8859-1&SMLOCALE=US-EN&target=https%3A%2F%2Ftools.cisco.com%2Femco%2Fappdir%2FAreaRoot.do%3FEMCOPageCode%3DENG&smauthreason=0

```
hostname(config)# aaa-server testgrp1 host example.com
hostname(config-aaa-server-host)# hidden-parameter SMENC=ISO-8859-1&SMLOCALE=US-EN&targe
hostname(config-aaa-server-host)# hidden-parameter t=https%3A%2F%2Ftools.cisco.com%2Femc
hostname(config-aaa-server-host)# hidden-parameter o%2Fappdir%2FAreaRoot.do%3FEMCOPageCo
hostname(config-aaa-server-host)# hidden-parameter de%3DENG&smauthreason=0
hostname(config-aaa-server-host)#
```

Related Commands

Command	Description
action-uri	Specifies a web server URI to receive a username and password for single sign-on authentication.
auth-cookie-name	Specifies a name for the authentication cookie.
password-parameter	Specifies the name of the HTTP POST request parameter in which a user password must be submitted for SSO authentication.
start-url	Specifies the URL at which to retrieve a pre-login cookie.
user-parameter	Specifies the name of the HTTP POST request parameter in which a username must be submitted for SSO authentication.

hidden-shares

To control the visibility of hidden shares for CIFS files, use the **hidden-shares** command in config-group-webvpn configuration mode. To remove the hidden shares option from the configuration, use the **no** form of this command.

hidden-shares {none | visible}

[no] hidden-shares {none | visible}

Syntax Description

none	Specifies that no configured hidden shares are visible or accessible to users.
visible	Reveals hidden shares, making them accessible to users.

Defaults

The default behavior for this command is none.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Group-webvpn configuration	•	•	•	•	—

Command History

Release	Modification
8.0(2)	This command was introduced.

Usage Guidelines

A hidden share is identified by a dollar sign (\$) at the end of the share name. For example, drive C is shared as C\$. With hidden shares, a shared folder is not displayed, and users are restricted from browsing or accessing these hidden resources.

The **no** form of the **hidden-shares** command removes the option from the configuration and disables hidden shares as a group policy attribute.

Examples

The following example makes visible WebVPN CIFS hidden-shares related to GroupPolicy2:

```
hostname(config)# webvpn
hostname(config-group-policy)# group-policy GroupPolicy2 attributes
hostname(config-group-policy)# webvpn
hostname(config-group-webvpn)# hidden-shares visible
hostname(config-group-webvpn)#
```

Related Commands

Command	Description
debug webvpn cifs	Displays debug messages about the CIFS.
group-policy attributes	Enters config-group-policy mode, which lets you configure attributes and values for a specified group policy or lets you enter WebVPN mode to configure WebVPN attributes for the group.
url-list	(Global Configuration Mode) Configures a set of URLs for WebVPN users to access.
url-list	(WebVPN Mode) Applies a list of WebVPN servers and URLs to a particular user or group policy.

hold-time

To specify the hold time advertised by the security appliance in EIGRP hello packets, use the **hold-time** command in interface configuration mode. To return the hello interval to the default value, use the **no** form of this command.

hold-time eigrp *as-number seconds*

no hold-time eigrp *as-number seconds*

Syntax Description

<i>as-number</i>	The autonomous system number of the EIGRP routing process.
<i>seconds</i>	Specifies the hold time, in seconds. Valid values are from 1 to 65535 seconds.

Defaults

The default *seconds* is 15 seconds.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Interface configuration	•	—	•	—	—

Command History

Release	Modification
8.0(2)	This command was introduced.

Usage Guidelines

This value is advertised in the EIGRP hello packets sent by the security appliance. The EIGRP neighbors on that interface use this value to determine the availability of the security appliance. If they do not receive a hello packet from the security appliance during the advertised hold time, the EIGRP neighbors will consider the security appliance to be unavailable.

On very congested and large networks, the default hold time might not be sufficient time for all routers and access servers to receive hello packets from their neighbors. In this case, you may want to increase the hold time.

We recommend that the hold time be at least three times the hello interval. If the security appliance does not receive a hello packet within the specified hold time, routes through this neighbor are considered unavailable.

Increasing the hold time delays route convergence across the network.

Examples

The following example sets the EIGRP hello interval to 10 seconds and the hold time to 30 seconds:

```
hostname(config-if)# hello-interval eigrp 100 10
```

```
hostname(config-if)# hold-time eigrp 100 30
```

Related Commands

Command	Description
hello-interval	Specifies the interval between EIGRP hello packets sent on an interface.

homepage

To specify a URL for the web page that displays upon login for this WebVPN user or group policy, use the **homepage** command in webvpn mode, which you enter from group-policy or username mode. To remove a configured home page, including a null value created by issuing the **homepage none** command, use the **no** form of this command. The **no** option allows inheritance of a value from another group policy. To prevent inheriting a home page, use the **homepage none** command.

homepage {*value url-string* | **none**}

no homepage

Syntax Description

none	Indicates that there is no WebVPN home page. Sets a null value, thereby disallowing a home page. Prevents inheriting an home page.
value <i>url-string</i>	Provides a URL for the home page. The string must begin with either http:// or https://.

Defaults

There is no default home page.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Webvpn mode	•	—	•	—	—

Command History

Release	Modification
7.0(1)	This command was introduced.

Usage Guidelines

To specify a homepage URL for users associated with the group policy, enter a value for the url-string in this command. To inherit a home page from the default group policy, use the **no** form of the comand. Clientless users are immediately brought to this page after successful authentication. AnyConnect launches the default web browser to this URL upon successful establishment of the VPN connection. On Linux platforms, AnyConnect does not currently support this command and ignores it.

Examples

The following example shows how to specify www.example.com as the home page for the group policy named FirstGroup:

```
hostname(config)# group-policy FirstGroup attributes
hostname(config-group-policy)# webvpn
hostname(config-group-webvpn)# homepage value http://www.example.com
```

Related Commands

Command	Description
webvpn	Use in group-policy configuration mode or in username configuration mode. Lets you enter webvpn mode to configure parameters that apply to group policies or usernames.

host

To specify a host to interact with using RADIUS accounting, use the **host** command in radius-accounting parameter configuration mode, which is accessed by using the **parameters** command in the policy-map type inspect radius-accounting submode. To disable specified host, use the **no** form of this command. This option is disabled by default.

host *address* [**key** *secret*]

no host *address* [**key** *secret*]

Syntax Description

host	Specifies a single endpoint sending the RADIUS accounting messages.
<i>address</i>	The IP address of the client or server sending the RADIUS accounting messages.
key	Optional keyword to specify the secret of the endpoint sending the gratuitous copy of the accounting messages.
<i>secret</i>	The shared secret key of the endpoint sending the accounting messages used to validate the messages. This can be up to 128 alphanumeric characters.

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
radius-accounting parameter configuration	•	•	•	•	—

Command History

Release	Modification
7.2(1)	This command was introduced.

Usage Guidelines

Multiple instances of this command are allowed.

Examples

The following example shows how to specify a host with RADIUS accounting:

```
hostname(config)# policy-map type inspect radius-accounting ra
hostname(config-pmap)# parameters
hostname(config-pmap-p)# host 209.165.202.128 key cisco123
```

Related Commands	Commands	Description
	inspect radius-accounting	Sets inspection for RADIUS accounting.
	parameters	Sets parameters for an inspection policy map.

hostname

To set the security appliance hostname, use the **hostname** command in global configuration mode. To restore the default hostname, use the **no** form of this command. The hostname appears as the command line prompt, and if you establish sessions to multiple devices, the hostname helps you keep track of where you enter commands.

hostname *name*

no hostname [*name*]

Syntax Description

<i>name</i>	Specifies a hostname up to 63 characters. A hostname must start and end with a letter or digit, and have as interior characters only letters, digits, or a hyphen.
-------------	--

Defaults

The default hostname depends on your platform.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple Context	System
Global configuration	•	•	•	•	•

Command History

Release	Modification
7.0(1)	You can no longer use non-alphanumeric characters (other than a hyphen).

Usage Guidelines

For multiple context mode, the hostname that you set in the system execution space appears in the command line prompt for all contexts.

The hostname that you optionally set within a context does not appear in the command line, but can be used for the **banner** command **\$(hostname)** token.

Examples

The following example sets the hostname to firewall1:

```
hostname(config)# hostname firewall1
firewall1(config)#
```

Related Commands

Command	Description
banner	Sets a login, message of the day, or enable banner.
domain-name	Sets the default domain name.

hsi

To add an HSI to an HSI group for H.323 protocol inspection, use the **hsi** command in hsi group configuration mode. To disable this feature, use the **no** form of this command.

hsi *ip_address*

no hsi *ip_address*

Syntax Description

<i>ip_address</i>	IP address of the host to add. A maximum of five HSIs per HSI group is allowed.
-------------------	---

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
HSI group configuration	•	•	•	•	—

Command History

Release	Modification
7.2(1)	This command was introduced.

Examples

The following example shows how to add an HSI to an HSI group in an H.323 inspection policy map:

```
hostname(config-pmap-p)# hsi-group 10
hostname(config-h225-map-hsi-grp)# hsi 10.10.15.11
```

Related Commands

Command	Description
class-map	Creates a Layer 3/4 class map.
endpoint	Adds an endpoint to the HSI group.
hsi-group	Creates an HSI group.
policy-map	Creates a Layer 3/4 policy map.
show running-config policy-map	Display all current policy map configurations.

hsi-group

To define an HSI group for H.323 protocol inspection and to enter hsi group configuration mode, use the **hsi-group** command in parameters configuration mode. To disable this feature, use the **no** form of this command.

hsi-group *group_id*

no hsi-group *group_id*

Syntax Description

group_id HSI group ID number (0 to 2147483647).

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple Context	System
Parameters configuration	•	•	•	•	—

Command History

Release	Modification
7.2(1)	This command was introduced.

Examples

The following example shows how to configure an HSI group in an H.323 inspection policy map:

```
hostname(config-pmap-p)# hsi-group 10
hostname(config-h225-map-hsi-grp)# hsi 10.10.15.11
hostname(config-h225-map-hsi-grp)# endpoint 10.3.6.1 inside
hostname(config-h225-map-hsi-grp)# endpoint 10.10.25.5 outside
```

Related Commands

Command	Description
class-map	Creates a Layer 3/4 class map.
endpoint	Adds an endpoint to the HSI group.
hsi	Adds an HSI to the HSI group.
policy-map	Creates a Layer 3/4 policy map.
show running-config policy-map	Display all current policy map configurations.

html-content-filter

To filter Java, ActiveX, images, scripts, and cookies for WebVPN sessions for this user or group policy, use the **html-content-filter** command in webvpn configuration mode. To remove a content filter, use the **no** form of this command.

html-content-filter {**java** | **images** | **scripts** | **cookies** | **none**}

no html-content-filter [**java** | **images** | **scripts** | **cookies** | **none**]

Syntax Description

cookies	Removes cookies from images, providing limited ad filtering and privacy.
images	Removes references to images (removes tags).
java	Removes references to Java and ActiveX (removes <EMBED>, <APPLET>, and <OBJECT> tags).
none	Indicates that there is no filtering. Sets a null value, thereby disallowing filtering. Prevents inheriting filtering values.
scripts	Removes references to scripting (removes <SCRIPT> tags).

Defaults

No filtering occurs.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Webvpn configuration	•	—	•	—	—

Command History

Release	Modification
7.0(1)	This command was introduced.

Usage Guidelines

To remove all content filters, including a null value created by issuing the **html-content-filter none** command, use the **no** form of this command without arguments. The **no** option allows inheritance of a value from another group policy. To prevent inheriting an html content filter, use the **html-content-filter none** command.

Using the command a second time overrides the previous setting.

Examples

The following example shows how to set filtering of JAVA and ActiveX, cookies, and images for the group policy named FirstGroup:

```
hostname(config)# group-policy FirstGroup attributes
hostname(config-group-policy)# webvpn
```

```
hostname(config-group-webvpn)# html-content-filter java cookies images
```

Related Commands

Command	Description
webvpn (group-policy, username)	Use in group-policy configuration mode or in username configuration mode. Lets you enter webvpn mode to configure parameters that apply to group policies or usernames.
webvpn	Use in global configuration mode. Lets you configure global settings for WebVPN.

http

To specify hosts that can access the HTTP server internal to the security appliance, use the **http** command in global configuration mode. To remove one or more hosts, use the **no** form of this command. To remove the attribute from the configuration, use the **no** form of this command without arguments.

http *ip_address subnet_mask interface_name*

no http

Syntax Description

<i>interface_name</i>	Provides the name of the security appliance interface through which the host can access the HTTP server.
<i>ip_address</i>	Provides the IP address of a host that can access the HTTP server.
<i>subnet_mask</i>	Provides the subnet mask of a host that can access the HTTP server.

Defaults

No hosts can access the HTTP server.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Global configuration	•	—	•	—	—

Command History

Release	Modification
Preexisting	This command was preexisting.

Examples

The following example shows how to allow the host with the IP address of 10.10.99.1 and the subnet mask of 255.255.255.255 access to the HTTP server via the outside interface:

```
hostname(config)# http 10.10.99.1 255.255.255.255 outside
```

The next example shows how to allow any host access to the HTTP server via the outside interface:

```
hostname(config)# http 0.0.0.0 0.0.0.0 outside
```

Related Commands

Command	Description
clear configure http	Removes the HTTP configuration: disables the HTTP server and removes hosts that can access the HTTP server.
http authentication-certificate	Requires authentication via certificate from users who are establishing HTTPS connections to the security appliance.

Command	Description
http redirect	Specifies that the security appliance redirect HTTP connections to HTTPS.
http server enable	Enables the HTTP server.
show running-config http	Displays the hosts that can access the HTTP server, and whether or not the HTTP server is enabled.

http authentication-certificate

To require certificate authentication for management or ASDM connections to a specific interface on the security appliance, use the **http authentication-certificate** command in global configuration mode. To remove the requirement from the configuration, use the **no** version of this command.

http authentication-certificate *interface*

no http authentication-certificate [*interface*]

Syntax Description

interface Specifies the interface on the security appliance that requires certificate authentication for management and ASDM connections.

Defaults

HTTPS certificate authentication is disabled for ASDM connections.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Global configuration	•	—	•	—	—

Command History

Release	Modification
7.0(1)	This command was introduced.
8.0(2)	This command was modified to apply only to management and ASDM connections. Prior versions applied to WebVPN client connections as well.

Usage Guidelines

To specify client certificate requests for SSL VPN or WebVPN connections, refer to the **authentication-certificate** command.

To remove all **http authentication-certificate** commands from the configuration, use the **no** version without arguments.

You can configure certificate authentication for each interface, such that connections on a trusted/inside interface do not have to provide a certificate. You can use the command multiple times to enable certificate authentication on multiple interfaces.

The ASDM uses its own authentication method in addition to this value. That is, it requires both certificate and username/password authentication if both are configured, or just username/password if certificate authentication is disabled.

Examples

```
hostname(config)# http authentication-certificate inside
hostname(config)# http authentication-certificate external
```

Related Commands	Command	Description
	authentication-certificate	Specifies that a client certificate should be requested from a WebVPN user during connection establishment.
	clear configure http	Removes the HTTP configuration: disables the HTTP server and removes hosts that can access the HTTP server.
	http	Specifies hosts that can access the HTTP server by IP address and subnet mask. Specifies the security appliance interface through which the host accesses the HTTP server.
	http redirect	Specifies that the security appliance redirect HTTP connections to HTTPS.
	http server enable	Enables the HTTP server.
	show running-config http	Displays the hosts that can access the HTTP server, and whether or not the HTTP server is enabled.
	ssl trust-point	Configures PK1 trustpoints for certificate validation.

http-comp

To enable compression of http data over a WebVPN connection for a specific group or user, use the **http-comp** command in the group-policy webvpn and username webvpn configuration modes. To remove the command from the configuration and cause the value to be inherited, use the **no** form of this command.

http-comp {gzip | none}

no http-comp {gzip | none}

Syntax Description

gzip	Specifies compression is enabled for the group or user.
none	Specifies compression is disabled for the group or user.

Defaults

By default, compression is set to *gzip*.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Group-policy webvpn configuration	•	—	•	—	—
Username webvpn configuration	•	—	•	—	—

Command History

Release	Modification
7.1.1	This command was introduced.

Usage Guidelines

For WebVPN connections, the **compression** command configured from global configuration mode overrides the **http-comp** command configured in group policy and username webvpn configuration modes.

Examples

In the following example, compression is disabled for the group-policy sales:

```
hostname(config)# group-policy sales attributes
hostname(config-group-policy)# webvpn
hostname(config-group-webvpn)# http-comp none
```

Related Commands

Command	Description
compression	Enables compression for all SVC, WebVPN, IPSec VPN connections.

http-proxy

To configure the security appliance to use an external proxy server to handle HTTP requests, use the **http-proxy** command in webvpn configuration mode. To remove the HTTP proxy server from the configuration, use the **no** form of this command.

http-proxy {*host* [*port*] [**exclude** *url*] | **pac** *pacfile*} [**username** *username* {**password** *password*}]

no http-proxy

Syntax Description

<i>host</i>	Hostname or IP address for the external HTTP proxy server.
pac <i>pacfile</i>	Identifies the PAC file that contains a JavaScript function that specifies one or more proxies.
password	(Optional, and available only if you specify a <i>username</i>) Enter this keyword to accompany each HTTP proxy request with a password to provide basic, proxy authentication.
<i>password</i>	Password to send to the proxy server with each HTTP request.
<i>port</i>	(Optional) Port number used by the HTTP proxy server. The default port is 80, which is the port the security appliance uses if you do not supply a value. The range is 1-65535.
<i>url</i>	Enter a URL or a comma-delimited list of several URLs to exclude from those that can be sent to the proxy server. The string does not have a character limit, but the entire command cannot exceed 512 characters. You can specify literal URLs or use the following wildcards: • * to match any string, including slashes (/) and periods (.). You must accompany this wildcard with an alphanumeric string. • ? to match any single character, including slashes and periods. • [x-y] to match any single character in the range of x and y, where x represents one character and y represents another character in the ANSI character set. • [!x-y] to match any single character that is not in the range.
username	(Optional) Enter this keyword to accompany each HTTP proxy request with a username to provide basic, proxy authentication.
<i>username</i>	Username to send to the proxy server with each HTTP request.

Defaults

By default, no HTTP proxy server is configured.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Webvpn configuration	•	—	•	—	—

Command History

Release	Modification
8.0(2)	Added exclude , username , and password keywords.
7.0(1)	This command was introduced.

Usage Guidelines

Requiring Internet access via a server that the organization controls provides another opportunity for filtering to assure secure Internet access and administrative control.

The security appliance supports only one instance of the `http-proxy` command. If one instance of this command is already present in the running configuration and you enter another instance, the CLI overwrites the previous instance. The CLI lists any `http-proxy` commands in the running configuration if you enter the **show running-config webvpn** command. If the response does not list an **http -proxy** command, then none is present.

Examples

The following example shows how to configure use of an HTTP proxy server with an IP address of 209.165. 201.2 using the default port, 443:

```
hostname(config)# webvpn
hostname(config-webvpn)# http-proxy 209.165.201.2
hostname(config-webvpn)
```

The following example shows how to configure use of the same proxy server, and send a username and password with each HTTP request:

```
hostname(config-webvpn)# http-proxy 209.165.201.2 jsmith password mysecretdonttell
hostname(config-webvpn)
```

The following example shows the same command, except when the security appliance receives the specific URL `www.example.com` in an HTTP request, it resolves the request instead of passing it on to the proxy server:

```
hostname(config-webvpn)# http-proxy 209.165.201.2 exclude www.example.com username jsmith
password mysecretdonttell
hostname(config-webvpn)
```

The following example shows how to use the `exclude` option:

```
hostname(config-webvpn)# http-proxy 10.1.1.1 port 8080 exclude *.com username John password
12345678
hostname(config-webvpn)
```

The following example shows how to use the `pac` option:

```
hostname(config-webvpn)# http-proxy pac http://10.1.1.1/pac.js
hostname(config-webvpn)
```

Related Commands

Command	Description
https-proxy	Configures the use of an external proxy server to handle HTTPS requests.
show running-config webvpn	Displays the running configuration for SSL VPN, including any HTTP and HTTPS proxy servers.

http-proxy (dap)

To enable or disable HTTP proxy port forwarding, use the **http-proxy** command in dap webvpn configuration mode. To remove the attribute from the configuration, use the **no** version of this command.

http-proxy {enable | disable | auto-start}

no http-proxy

Syntax Description

auto-start	Enables and automatically starts HTTP proxy port forwarding for the DAP record.
enable/disable	Enables or disables HTTP proxy port forwarding for the DAP record.

Defaults

No default value or behaviors.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Dap-webvpn configuration	•	•	•	—	—

Command History

Release	Modification
8.0(2)	This command was introduced.

Usage Guidelines

The security appliance can apply attribute values from a variety of sources. It applies them according to the following hierarchy:

1. DAP record
2. Username
3. Group policy
4. Group policy for the tunnel group
5. Default group policy

It follows that DAP values for an attribute have a higher priority than those configured for a user, group policy, or tunnel group.

When you enable or disable an attribute for a DAP record, the security appliance applies that value and enforces it. For example, when you disable HTTP proxy in dap webvpn mode, the security appliance looks no further for a value. When you instead use the **no** value for the **http-proxy** command, the attribute is not present in the DAP record, so the security appliance moves down to the AAA attribute in the username, and if necessary, the group policy to find a value to apply.

Examples

The following example shows how to enable HTTP proxy port forwarding for the dynamic access policy record named Finance.

```
hostname (config)# dynamic-access-policy-record Finance
hostname(config-dynamic-access-policy-record)# webvpn
hostname(config-dap-webvpn)# http-proxy enable
hostname(config-dap-webvpn)#
```

Related Commands

Command	Description
dynamic-access-policy-record	Creates a DAP record.
show running-config dynamic-access-policy-record <i>[name]</i>	Displays the running configuration for all DAP records, or for the named DAP record.

http redirect

To specify that the security appliance redirect HTTP connections to HTTPS, use the **http redirect** command in global configuration mode. To remove a specified http redirect command from the configuration, use the **no** version of this command. To remove all http redirect commands from the configuration, use the **no** version of this command without arguments.

http redirect *interface* [*port*]

no http redirect [*interface*]

Syntax Description

<i>interface</i>	Identifies the interface for which the security appliance should redirect HTTP requests to HTTPS.
<i>port</i>	Identifies the port the security appliance listens on for HTTP requests, which it then redirects to HTTPS. By default it listens on port 80,

Defaults

HTTP redirect is disabled.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Global configuration	•	—	•	—	—

Command History

Release	Modification
7.0(1)	This command was introduced.

Usage Guidelines

The interface requires an access list that permits HTTP. Otherwise the security appliance does not listen to port 80, or to any other port that you configure for HTTP.

Examples

The following example shows how to configure HTTP redirect for the inside interface, keeping the default port 80:

```
hostname(config)# http redirect inside
```

Related Commands

Command	Description
clear configure http	Removes the HTTP configuration: disables the HTTP server and removes hosts that can access the HTTP server.
http	Specifies hosts that can access the HTTP server by IP address and subnet mask. Specifies the security appliance interface through which the host accesses the HTTP server.
http authentication-certificate	Requires authentication via certificate from users who are establishing HTTPS connections to the security appliance.
http server enable	Enables the HTTP server.
show running-config http	Displays the hosts that can access the HTTP server, and whether or not the HTTP server is enabled.

http server enable

To enable the security appliance HTTP server, use the **http server enable** command in global configuration mode. To disable the HTTP server, use the **no** form of this command.

http server enable [*port*]

Syntax Description

<i>port</i>	The port to use for HTTP connections. The range is 1-65535. The default port is 443.
-------------	--

Defaults

The HTTP server is disabled.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple Context	System
Global configuration	•	—	•	—	—

Command History

Release	Modification
Preexisting	This command was preexisting.

Examples

The following example shows how to enable the HTTP server.

```
hostname(config)# http server enable
```

Related Commands

Command	Description
clear configure http	Removes the HTTP configuration: disables the HTTP server and removes hosts that can access the HTTP server.
http	Specifies hosts that can access the HTTP server by IP address and subnet mask. Specifies the security appliance interface through which the host accesses the HTTP server.
http authentication-certificate	Requires authentication via certificate from users who are establishing HTTPS connections to the security appliance.
http redirect	Specifies that the security appliance redirect HTTP connections to HTTPS.
show running-config http	Displays the hosts that can access the HTTP server, and whether or not the HTTP server is enabled.

https-proxy

To configure the security appliance to use an external proxy server to handle HTTPS requests, use the **https-proxy** command in webvpn configuration mode. To remove the HTTPS proxy server from the configuration, use the **no** form of this command.

```
https-proxy {host [port] [exclude url] | pac pacfile} [username username {password password}]
```

```
no https-proxy
```

Syntax Description

<i>host</i>	Hostname or IP address for the external HTTPS proxy server.
pac <i>pacfile</i>	Identifies the PAC file that contains a JavaScript function that specifies one or more proxies.
password	(Optional, and available only if you specify a <i>username</i>) Enter this keyword to accompany each HTTPS proxy request with a password to provide basic, proxy authentication.
<i>password</i>	Password to send to the proxy server with each HTTPS request.
<i>port</i>	(Optional) Port number used by the HTTPS proxy server. The default port is 443, which is the port the security appliance uses if you do not supply a value. The range is 1-65535.
<i>url</i>	Enter a URL or a comma-delimited list of several URLs to exclude from those that can be sent to the proxy server. The string does not have a character limit, but the entire command cannot exceed 512 characters. You can specify literal URLs or use the following wildcards: * to match any string, including slashes (/) and periods (.). You must accompany this wildcard with an alphanumeric string. ? to match any single character, including slashes and periods. [<i>x-y</i>] to match any single character in the range of <i>x</i> and <i>y</i>, where <i>x</i> represents one character and <i>y</i> represents another character in the ANSI character set. [!<i>x-y</i>] to match any single character that is not in the range.
username	(Optional) Enter this keyword to accompany each HTTPS proxy request with a username to provide basic, proxy authentication.
<i>username</i>	Username to send to the proxy server with each HTTPS request.

Defaults

By default, no HTTPS proxy server is configured.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Webvpn configuration	•	—	•	—	—

Command History

Release	Modification
7.3(0)	Added exclude , username , and password keywords.
7.0(1)	This command was introduced.

Usage Guidelines

Requiring Internet access via a server that the organization controls provides another opportunity for filtering to assure secure Internet access and administrative control.

The security appliance supports only one instance of the **https-proxy** command. If one instance of this command is already present in the running configuration and you enter another instance, the CLI overwrites the previous instance. The CLI lists any **https-proxy** commands in the running configuration if you enter the **show running-config webvpn** command. If the response does not list an **https-proxy** command, then none is present.

Examples

The following example shows how to configure use of an HTTPS proxy server with an IP address of 209.165.201.2 using the default port, 443:

```
hostname(config)# webvpn
hostname(config-webvpn)# https-proxy 209.165.201.2
hostname(config-webvpn)
```

The following example shows how to configure use of the same proxy server, and send a username and password with each HTTPS request:

```
hostname(config-webvpn)# https-proxy 209.165.201.2 jsmith password mysecretdonttell
hostname(config-webvpn)
```

The following example shows the same command, except when the security appliance receives the specific URL **www.example.com** in an HTTPS request, it resolves the request instead of passing it on to the proxy server:

```
hostname(config-webvpn)# https-proxy 209.165.201.2 exclude www.example.com username jsmith
password mysecretdonttell
hostname(config-webvpn)
```

```
hostname(config-webvpn)# https-proxy 10.1.1.1 port 8080 exclude *.com username John
password 12345678
hostname(config-webvpn)
```

The following example shows how to use the **pac** option:

```
hostname(config-webvpn)# https-proxy pac http://10.1.1.1/pac.js
hostname(config-webvpn)
```

Related Commands

Command	Description
http-proxy	Configures the use of an external proxy server to handle HTTP requests.
show running-config webvpn	Displays the running configuration for SSL VPN, including any HTTP and HTTPS proxy servers.

hw-module module password-reset

To reset the password on the hardware module to the default value, “cisco,” use the **hw-module module password reset** command in privileged EXEC mode.

hw-module module slot# password-reset

Syntax Description	slot# Specifies the slot number.
---------------------------	---

Defaults	No default behavior or values.
-----------------	--------------------------------

Command Modes	The following table shows the modes in which you can enter the command:
----------------------	---

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple Context	System
Privileged EXEC	•	•	•	•	—

Command History	Release	Modification
	7.2(2)	This command was introduced.

Usage Guidelines	This command is only valid when the hardware module is in the Up state and supports password reset. On the AIP SSM, running this command results in rebooting of the module. The module is offline until the rebooting is finished, which may take several minutes. You can run the show module command to monitor the module state.
-------------------------	--

The command always prompts for confirmation. If the command succeeds, no other output appears. If the command fails, an error message appears that explains why the failure occurred. The possible error messages are as follows:

Unable to reset the password on the module in slot 1

Unable to reset the password on the module in slot 1 - unknown module state

Unable to reset the password on the module in slot 1 - no module installed

Failed to reset the password on the module in slot 1 - module not in Up state

Unable to reset the password on the module in slot 1 - unknown module type

The module in slot [n] does not support password reset

Unable to reset the password on the module in slot 1 - no application found

The SSM application version does not support password reset

Failed to reset the password on the module in slot 1

Examples

The following example resets a password on a hardware module in slot 1:

```
hostname (config)# hw-module module 1 password-reset
Reset the password on module in slot 1? [confirm] y
```

Related Commands

Command	Description
hw-module module recover	Recovers an intelligent SSM by loading a recovery image from a TFTP server.
hw-module module reload	Reloads the intelligent SSM software.
hw-module module reset	Shuts down and resets the SSM hardware.
hw-module module shutdown	Shuts down the SSM software in preparation for being powered off without losing configuration data.
show module	Shows SSM information.

hw-module module recover

To load a recovery software image from a TFTP server to an intelligent SSM (for example, the AIP SSM), or to configure network settings to access the TFTP server, use the **hw-module module recover** command in privileged EXEC mode. You might need to recover an SSM using this command if, for example, the SSM is unable to load a local image. This command is not available for interface SSMs (for example, the 4GE SSM).

hw-module module 1 recover { **boot** | **stop** | **configure** [*url tftp_url* | *ip port_ip_address* | *gateway gateway_ip_address* | *vlan vlan_id*] }

Syntax Description

1	Specifies the slot number, which is always 1.
boot	Initiates recovery of the SSM and downloads a recovery image according to the configure settings. The SSM then reboots from the new image.
configure	Configures the network parameters to download a recovery image. If you do not enter any network parameters after the configure keyword, you are prompted for the information.
gateway <i>gateway_ip_address</i>	(Optional) Specifies the gateway IP address for access to the TFTP server through the SSM management interface.
ip <i>port_ip_address</i>	(Optional) Specifies the IP address of the SSM management interface.
stop	Stops the recovery action, and stops downloading the recovery image. The SSM boots from the original image. You must enter this command within 30 to 45 seconds after starting recovery using the hw-module module boot command. If you issue the stop command after this period, it might cause unexpected results, such as the SSM becoming unresponsive.
url <i>tftp_url</i>	(Optional) Specifies the URL for the image on a TFTP server, in the following format: tftp://server/[path/]filename
vlan <i>vlan_id</i>	(Optional) Sets the VLAN ID for the management interface.

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Privileged EXEC	•	•	•	—	•

Command History

Release	Modification
7.0(1)	This command was introduced.

Usage Guidelines

This command is only available when the SSM is in the Up, Down, Unresponsive, or Recovery state. See the **show module** command for state information.

Examples

The following example sets the SSM to download an image from a TFTP server:

```
hostname# hw-module module 1 recover configure
Image URL [tftp://127.0.0.1/myimage]: tftp://10.1.1.1/ids-newimg
Port IP Address [127.0.0.2]: 10.1.2.10
Port Mask [255.255.255.254]: 255.255.255.0
Gateway IP Address [1.1.2.10]: 10.1.2.254
VLAN ID [0]: 100
```

The following example recovers the SSM:

```
hostname# hw-module module 1 recover boot
The module in slot 1 will be recovered. This may
erase all configuration and all data on that device and
attempt to download a new image for it.
Recover module in slot 1? [confirm]
```

Related Commands

Command	Description
debug module-boot	Shows debugging messages about the SSM booting process.
hw-module module reset	Shuts down an SSM and performs a hardware reset.
hw-module module reload	Reloads the intelligent SSM software.
hw-module module shutdown	Shuts down the SSM software in preparation for being powered off without losing configuration data.
show module	Shows SSM information.

hw-module module reload

To reload an intelligent SSM software (for example, the AIP SSM), use the **hw-module module reload** command in privileged EXEC mode. This command is not available for interface SSMs (for example, the 4GE SSM).

hw-module module 1 reload

Syntax Description

1 Specifies the slot number, which is always 1.

Defaults

No default behavior or values.

Command Modes

The following table shows the modes in which you can enter the command:

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Privileged EXEC	•	•	•	—	•

Command History

Release	Modification
7.0(1)	This command was introduced.

Usage Guidelines

This command is only valid when the SSM status is Up. See the **show module** command for state information.

This command differs from the **hw-module module reset** command, which also performs a hardware reset.

Examples

The following example reloads the SSM in slot 1:

```
hostname# hw-module module 1 reload
Reload module in slot 1? [confirm] y
Reload issued for module in slot 1
%XXX-5-505002: Module in slot 1 is reloading. Please wait...
%XXX-5-505006: Module in slot 1 is Up.
```

Related Commands

Command	Description
debug module-boot	Shows debugging messages about the SSM booting process.
hw-module module recover	Recovers an intelligent SSM by loading a recovery image from a TFTP server.

Command	Description
hw-module module reset	Shuts down an SSM and performs a hardware reset.
hw-module module shutdown	Shuts down the SSM software in preparation for being powered off without losing configuration data.
show module	Shows SSM information.

hw-module module reset

To shut down and reset the SSM hardware, use the **hw-module module reset** command in privileged EXEC mode.

hw-module module 1 reset

Syntax Description	1 Specifies the slot number, which is always 1.
---------------------------	--

Defaults	No default behavior or values.
-----------------	--------------------------------

Command Modes	The following table shows the modes in which you can enter the command:
----------------------	---

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Privileged EXEC	•	•	•	—	•

Command History	Release	Modification
	7.0(1)	This command was introduced.

Usage Guidelines	This command is only valid when the SSM status is Up, Down, Unresponsive, or Recover. See the show module command for state information.
-------------------------	---

When the SSM is in an Up state, the **hw-module module reset** command prompts you to shut down the software before resetting.

You can recover intelligent SSMs (for example, the AIP SSM) using the **hw-module module recover** command. If you enter the **hw-module module reset** while the SSM is in a Recover state, the SSM does not interrupt the recovery process. The **hw-module module reset** command performs a hardware reset of the SSM, and the SSM recovery continues after the hardware reset. You might want to reset the SSM during recovery if the SSM hangs; a hardware reset might resolve the issue.

This command differs from the **hw-module module reload** command, which only reloads the software and does not perform a hardware reset.

Examples	The following example resets an SSM in slot 1 that is in the Up state:
-----------------	--

```
hostname# hw-module module 1 reset
The module in slot 1 should be shut down before
resetting it or loss of configuration may occur.
Reset module in slot 1? [confirm] y
Reset issued for module in slot 1
%XXX-5-505001: Module in slot 1 is shutting down. Please wait...
%XXX-5-505004: Module in slot 1 shutdown is complete.
```

```
%XXX-5-505003: Module in slot 1 is resetting. Please wait...
%XXX-5-505006: Module in slot 1 is Up.
```

Related Commands

Command	Description
debug module-boot	Shows debugging messages about the SSM booting process.
hw-module module recover	Recovers an intelligent SSM by loading a recovery image from a TFTP server.
hw-module module reload	Reloads the intelligent SSM software.
hw-module module shutdown	Shuts down the SSM software in preparation for being powered off without losing configuration data.
show module	Shows SSM information.

hw-module module shutdown

To shut down the SSM software, use the **hw-module module shutdown** command in privileged EXEC mode.

hw-module module 1 shutdown

Syntax Description	1	Specifies the slot number, which is always 1.
---------------------------	----------	---

Defaults	No default behavior or values.
-----------------	--------------------------------

Command Modes	The following table shows the modes in which you can enter the command:
----------------------	---

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Privileged EXEC	•	•	•	—	•

Command History	Release	Modification
	7.0(1)	This command was introduced.

Usage Guidelines	Shutting down the SSM software prepares the SSM to be powered off safely without losing configuration data.
	This command is only valid when the SSM status is Up or Unresponsive. See the show module command for state information.

Examples	The following example shuts down an SSM in slot 1:
-----------------	--

```
hostname# hw-module module 1 shutdown
Shutdown module in slot 1? [confirm] y
Shutdown issued for module in slot 1
hostname#
%XXX-5-505001: Module in slot 1 is shutting down. Please wait...
%XXX-5-505004: Module in slot 1 shutdown is complete.
```

Related Commands	Command	Description
	debug module-boot	Shows debug messages about the SSM booting process.
	hw-module module recover	Recovers an intelligent SSM by loading a recovery image from a TFTP server.

Command	Description
hw-module module reload	Reloads the intelligent SSM software.
hw-module module reset	Shuts down an SSM and performs a hardware reset.
show module	Shows SSM information.

