

g – h

- gateway, on page 3
- gateway-fqdn, on page 5
- graceful-restart, on page 7
- graceful-restart helper, on page 9
- group, on page 11
- group-alias, on page 13
- group-delimiter, on page 15
- group-lock, on page 16
- group-object, on page 17
- group-policy, on page 19
- group-policy attributes, on page 22
- group-prompt, on page 25
- group-search-timeout, on page 27
- group-url, on page 28
- gsn-limit, on page 30
- gtp-u-header-check, on page 31
- h245-tunnel-block, on page 33
- hardware-bypass, on page 34
- hardware-bypass boot-delay, on page 36
- hardware-bypass manual, on page 38
- health-check, on page 40
- health-check application, on page 42
- health-check auto-rejoin, on page 45
- health-check chassis-heartbeat-delay-rejoin, on page 48
- health-check monitor-interface, on page 50
- hello-interval, on page 53
- hello padding multi-point, on page 54
- help, on page 58
- hidden-parameter, on page 60
- hidden-shares, on page 62
- hold-time, on page 64
- homepage, on page 66
- homepage use-smart-tunnel, on page 68

- host (network object), on page 70
- host (parameters), on page 71
- hostname, on page 73
- hostname dynamic, on page 74
- hostscan enable, on page 78
- hostscan image, on page 80
- hpm topn enable, on page 82
- hsi, on page 83
- hsi-group, on page 84
- hsts enable, on page 85
- hsts max-age, on page 87
- html-content-filter, on page 89
- http (global), on page 91
- http[s] (parameters), on page 93
- http authentication-certificate, on page 95
- http-comp, on page 97
- http connection idle-timeout, on page 98
- http-only-cookie, on page 100
- http-only-cookie, on page 102
- http-proxy (call-home), on page 104
- http-proxy (dap), on page 106
- http-proxy (webvpn), on page 108
- http redirect, on page 111
- http server basic-auth-client, on page 113
- http server enable, on page 115
- http server idle-timeout, on page 116
- http server session-timeout, on page 118
- https-proxy, on page 120
- http username-from-certificate, on page 122
- hw-module module allow-ip, on page 125
- hw-module module ip, on page 126
- hw-module module password-reset, on page 128
- hw-module module recover, on page 130
- hw-module module recover (ASA 5506W-X), on page 133
- hw-module module reload, on page 134
- hw-module module reset, on page 136
- hw-module module shutdown, on page 138

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

Command Default

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
7.0(1)	This command was added.

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:

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

Related Commands

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

gateway-fqdn

To configure the FQDN of the ASA. use the **gateway-fqdn** command. To remove the configuration, use the **no** form of this command.

gateway-fqdn value { **FQDN_Name** | **none** }
no gateway-fqdn

Syntax Description

fqdn-name	Defines the ASA FQDN to push down to the Secure Client.
none	Defines the FQDN as null value where the FQDN is not specified. The global FQDN configured using hostname and domain-name commands will be used if available.

Command Default

The default FQDN name is not set in the default group policy. New group policies are set to inherit this value.

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 configuration	• Yes	—	• Yes	—	—

Command History

Release	Modification
9.0(1)	This command was added.

Usage Guidelines

If you have configured Load Balancing between your ASAs, specify the FQDN of the ASA in order to resolve the ASA IP address used for re-establishing the VPN session. This setting is critical to support client roaming between networks of different IP protocols (such as IPv4 to IPv6).

You cannot use the ASA FQDN present in the Secure Client profile to derive the ASA IP address after roaming. The addresses may not match the correct device (the one the tunnel was established to) in the load balancing scenario.

If the ASA's FQDN is not pushed to the client, the client will try to reconnect to whatever IP address the tunnel had previously established. In order to support roaming between networks of different IP protocols (from IPv4 to IPv6), Secure Client must perform name resolution of the device FQDN after roaming, so that it can determine which ASA address to use for re-establishing the tunnel. The client uses the ASA FQDN present in its profile during the initial connection. During subsequent session reconnects, it always uses the device FQDN pushed by ASA (and configured by the administrator in the group policy), when available. If the FQDN is not configured, the ASA derives the device FQDN (and sends it to the client) from whatever is set under Device Setup > Device Name/Password and Domain Name in ASDM.

If the device FQDN is not pushed by the ASA, the client cannot reestablish the VPN session after roaming between networks of different IP protocols.

Usage Guidelines

Examples

The following example defines the FQDN of the ASA as ASAName.example.cisco.com

```
ciscoasa(config-group-policy)# gateway-fqdn value ASAName.example.cisco.com
ciscoasa(config-group-policy)#
```

The following example removes the FQDN of the ASA from the group policy. The group policy then inherits this value from the Default Group Policy.

```
ciscoasa(config-group-policy)# no gateway-fqdn
ciscoasa(config-group-policy)#
```

The following example defines the FQDN as having no value. The global FQDN configurd using ciscoasa and domain-name commands will be used if available.

```
ciscoasa(config-group-policy)# gateway-fqdn none
ciscoasa(config-group-policy)#
```

graceful-restart

To configure graceful restart for OSPFv3 on a NSF capable ASA, use the graceful-restart command under router configuration mode. Optionally, configure the graceful restart interval with the restart-interval option. Use the no form of the command to disable graceful-restart.

graceful-restart [**restart-interval** *seconds*]
no graceful-restart

Syntax Description

restart-interval seconds	(Optional) Specifies the length of the graceful restart interval, in seconds. The range is from 1 to 1800. The default is 120. **Note** For a restart interval below 30 seconds, graceful restart will be terminated.

Command Default

OSPFv3 graceful restart 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
Router configuration mode	• Yes	• Yes	• Yes	—	—

Command History

Release	Modification
9.3(1)	This command was introduced.

Usage Guidelines

Use the graceful-restart command to allow OSPFv3 to remain in the data forwarding path through a process restart.

Note Set the restart interval to be long enough to allow a typical reboot cycle for ASA. Do not set the restart-interval too long to avoid the network relying on old route information.

Examples

The following example enables OSPFv3 graceful-restart:

```
ciscoasa
(config)# ipv6 router ospf 1
ciscoasa
(config-router)# graceful-restart restart-interval 180
```

Related Commands

Command	Description
graceful-restart helper	Enables OSPFv3 graceful restart on NSF-aware ASA.

graceful-restart helper

To configure graceful restart for OSPFv3 on a NSF aware ASA, use the graceful-restartUse the no form of the command to disable graceful-restart helper mode.

graceful-restart helper [**strict-lsa-checking**]
no graceful-restart helper

Syntax Description

strict-lsa-checking	(Optional) Enables strict link-state advertisement (LSA) checking for helper mode.

Command Default

OSPFv3 graceful restart helper mode 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
Router configuration mode	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
9.3(1)	This command was introduced.

Usage Guidelines

When an ASA has NSF enabled, it is said to be NSF-capable and will operate in graceful restart mode--the OSPF process performs nonstop forwarding recovery due to a Route Processor (RP) switchover. By default, the neighboring ASAs of the NSF-capable ASA will be NSF-aware and will operate in NSF helper mode. When the NSF-capable ASA is performing graceful restart, the helper ASAs assist in the nonstop forwarding recovery process. If you do not want the ASA to help the restarting neighbor with nonstop forwarding recovery, enter the no nsf ietf helper command.

To enable strict LSA checking on both NSF-aware and NSF-capable ASAs, enter the graceful-restart helper strict-lsa-checking command. However, strict LSA checking will not become effective until the ASA becomes a helper ASA during a graceful restart process. With strict LSA checking enabled, the helper ASA will terminate the helping process of the restarting ASA if it detects that there is a change to an LSA that would be flooded to the restarting ASA or if there is a changed LSA on the retransmission list of the restarting ASA when the graceful restart process is initiated.

Examples

The following example enables graceful-restart helper with strict LSA checking:

```
ciscoasa
(config)# ipv6 router ospf 1
ciscoasa
(config-router)# graceful-restart helper strict-lsa-checking
```

Related Commands

Command	Description
graceful-restart	Enables OSPFv3 graceful restart on NSF-capable ASA.

group

To specify the Diffie-Hellman group in an IKEv2 security association (SA) for AnyConnect IPsec connections, use the group command in ikev2 policy configuration mode. To remove the command and use the default setting, use the **no** form of this command:

group { **1** | **2** | **5** | **14** | **19** | **20** | **21** | **24** }
no group { **1** | **2** | **5** | **14** | **19** | **20** | **21** | **24** }

Syntax Description

1	Specifies the 768-bit Diffie-Hellman group 1 (not supported in FIPS mode).
2	Specifies the 1024-bit Diffie-Hellman group 2.
5	Specifies the 1536-bit Diffie-Hellman group 5.
14	Chooses ECDH group as the IKEv2 DH key exchange group.
19	Chooses ECDH groups as the IKEv2 DH key exchange group.
20	Chooses ECDH groups as the IKEv2 DH key exchange group.
21	Chooses ECDH groups as the IKEv2 DH key exchange group.
24	Chooses ECDH groups as the IKEv2 DH key exchange group.

Command Default

The default Diffie-Hellman group is group 14.

Usage Guidelines

An IKEv2 SA is a key used in Phase 1 to enable IKEv2 peers to communicate securely in Phase 2. After entering the crypto ikev2 policy command, you can use the group command to set the SA Diffie-Hellman group. The ASA and the Secure Client use the group identifier to derive a shared secret without transmitting it to each other. The lower the Diffie-Hellman group number, the less CPU time it requires to execute. The higher the Diffie-Hellman group number, the greater the security.

When the Secure Client is operating in non-FIPS mode, the ASA supports Diffie-Hellman groups 1, 2 and 5. In FIPS mode, it supports groups 2 and 5. Therefore, if you configure the ASA to use only group 1, the Secure Client in FIPS mode will fail to connect.

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
Ikev2 policy configuration	• Yes	—	• Yes	—	—

Command History

Release	Modification
8.4(1)	This command was added.
9.0(1)	The ability to choose an ECDH group as the IKEv2 DH key exchange group was added.
9.13.(1)	The default DH group is **group 14.** The command options **group 2**, **group 5** and **group 24** was deprecated and will be removed in the later release.

Examples

The following example enters ikev2 policy configuration mode and sets the Diffie-Hellman group to group 5:

```
ciscoasa(config)# crypto ikev2 policy 1
ciscoasa(config-ikev2-policy)# group 5
ciscoasa(config-ikev2-policy) group 2(Deprecated)
ciscoasa(config-ikev2-policy) group 5(Deprecated)
ciscoasa(config-ikev2-policy) group 24(Deprecated)
ciscoasa(config-ikev2-policy) group 14
```

Related Commands

Command	Description
encryption	Specifies the encryption algorithm in an IKEv2 SA for AnyConnect IPsec connections.
group	Specifies the Diffie-Hellman group in an IKEv2 SA for AnyConnect IPsec connections.
lifetime	Specifies the SA lifetime for the IKEv2 SA for AnyConnect IPsec connections.
prf	Specifies the pseudo-random function in an IKEv2 SA for AnyConnect IPsec connections.

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.
name	Specifies the name of a tunnel group alias. This can be any string you choose, except that the string cannot contain spaces.

Command Default

There is 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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.1(1)	This command was added.

Usage Guidelines

The group alias that you specify 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 tunnel group named “devtest” and establishing the aliases “QA” and “Fra-QA” for the group:

```
ciscoasa(config)# tunnel-group devtest type webvpn
ciscoasa(config)# tunnel-group devtest webvpn-attributes
ciscoasa(config-tunnel-webvpn)# group-alias QA
ciscoasa(config-tunnel-webvpn)# group-alias Fra-QA
ciscoasa(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 **!**.

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.0(1)	This command was added.

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 (#):

```
ciscoasa(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.

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 *tunnel-grp-name*	Specifies the name of an existing tunnel group that the ASA requires for the user to connect.

Command Default

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-policy configuration	• Yes	—	• Yes	—	—
Username configuration	• Yes	—	• Yes	—	—

Usage Guidelines

To disable group lock, use the **group-lock none** command. The **no group-lock** command allows inheritance of a value from another group policy.

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 ASA prevents the user from connecting. If you do not configure group lock, the ASA authenticates users without regard to the assigned group.

Command History

Release	Modification
7.0(1)	This command was added.

Examples

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

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

group-object

To add group objects to object groups, use the**group-object** command while configuring the object. To remove group objects, use the **no** form of this command.

group-object*obj_grp_name*
no group-object *obj_grp_name*

Syntax Description

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

Command Default

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, security group, and user object-group configuration modes	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
7.0(1)	This command was added.
8.4(2)	Support for adding object groups in the object-group user configuration mode for use with the Identity Firewall feature was added.

Usage Guidelines

The **group-object** command is used with the **object-group** command to add an object that itself is an object group. 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 ASA does not support IPv6 nested network object groups, so you cannot group an object with IPv6 entries under another IPv6 object group.

Examples

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

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

The following example shows how to use the **group-object** command to add a local user group to a user group object:

```
ciscoasa(config)# object-group user sampleuser1-group
ciscoasa(config-object-group user)# description group members of sampleuser1-group
ciscoasa(config-object-group user)# user-group EXAMPLE\\group.sampleusers-all
ciscoasa(config-object-group user)# user EXAMPLE\user2
ciscoasa(config-object-group user)# exit
ciscoasa(config)# object-group user sampleuser2-group
ciscoasa(config-object-group user)# description group members of sampleuser2-group
ciscoasa(config-object-group user)# group-object sampleuser1-group
ciscoasa(config-object-group user)# user-group EXAMPLE\\group.sampleusers-marketing
ciscoasa(config-object-group user)# user EXAMPLE\user3
```

Related Commands

Command	Description
clear configure object-group	Removes all the **object-group** commands from the configuration.
object-group	Defines object groups to optimize your configuration.
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 *server_group*	Specifies the group policy as external and identifies the AAA server group for the ASA to query for attributes.
from *group-policy_name*	Initializes the attributes of this internal group policy to the values of a preexisting group policy.
internal	Identifies the group policy as internal.
name	Specifies the name of the group policy. The name can be up to 64 characters long and can contain spaces. Group names with spaces must be enclosed in double quotes, for example, “Sales Group”.
password *server_password*	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.

Command Default

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	• Yes	—	• Yes	• Yes	—

Command History

Release	Modification
7.0.1	This command was added.
9.0(1)	Support for multiple context mode was added.

Usage Guidelines

A default group policy, named “DefaultGroupPolicy,” always exists on the ASA. However, this default group policy does not take effect unless you configure the ASA to use it. For configuration instructions, see the CLI configuration guide.

Use the **group-policy attributes** command to enter group-policy configuration 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

Attribute	Default Value
vpn-simultaneous-logins	3
vpn-tunnel-protocol	IPsec WebVPN
wins-server	none

In addition, you can configure webvpn configuration mode attributes for the group policy, either by entering the **webvpn** command in group policy configuration mode or by entering the **group-policy attributes** command and then entering the **webvpn** command in group-webvpn configuration 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”:

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

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

```
ciscoasa
(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 group-policy configuration mode, which lets you configure attributes and values for a specified group policy or lets you enter webvpn configuration 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 webvpn configuration mode, in which you can configure the WebVPN attributes for the specified group.

group-policy attributes

To enter the group-policy configuration mode, use the **group-policy attributes** command in global configuration mode. To remove all attributes from a group policy, user the **no** form of this command.

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

Syntax Description

name	Specifies the name of the group policy.

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.0(1)	This command was added.

Usage Guidelines

In group-policy configuration 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.

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 ASA. However, this default group policy does not take effect unless you configure the ASA to use it. For configuration instructions, see the CLI configuration guide.

The **group-policy attributes** command enters group-policy configuration 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

Attribute	Default Value
banner	none
client-access-rule	none
client-bypass-protocol	disable
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

Attribute	Default Value
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 group-policy configuration 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:

```
ciscoasa(config)# group-policy FirstGroup attributes
ciscoasa(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	Enters group-webvpn configuration 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 ASA, 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*
group-prompt { **text** | **style** } *value*

Syntax Description

text	Specifies a change to the text.
style	Specifies a change the style.
value	The actual text to display or Cascading Style Sheet (CSS) parameters (the maximum number is 256 characters).

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.1(1)	This command was added.

Usage Guidelines

The **style** option is expressed as any valid 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:

```
ciscoasa(config)# webvpn
ciscoasa(config-webvpn)# customization cisco
ciscoasa(config-webvpn-custom)# group-prompt text Corporate Group:
ciscoasa(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.

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
8.0(4)	This command is added.

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:

```
ciscoasa(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.
url	Specifies a URL or IP address for this tunnel group.

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.1(1)	This command was added.

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 ASA looks for the user's incoming URL/address in the tunnel group policy table. If it finds the URL/address and if this command is enabled in the tunnel group, then the ASA 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 the **group-alias** command is configured, then the drop-down 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 ASA verifies the uniqueness of the URL/address before accepting it for a tunnel group.

Examples

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.example.com" for the group:

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

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

gsn-limit

To specify the maximum number of GPRS support node (GSN) endpoints tracked by the GPRS Tunneling Protocol (GTP) inspection engine, use the **gsn-limit** command. Use the **no** form of the command to remove the limit on the number of GSN endpoints tracked by the GTP inspection engine.

gsn-limit [*limit*]
no gsn-limit [*limit*]

Command Default

By default, the **gsn-limit** command specifies the maximum number of GSN endpoints tracked by the GTP inspection engine to 10,000.

Command History

Release	Modification
9.20	This command was introduced.

Usage Guidelines

If you do not want to use the default value, you can specify a value between 1 and 4294967295 for the *limit* parameter.

Examples

The following example shows how to set the maximum number of GPRS support node (GSN) endpoints tracked by the GTP inspection engine to 50,000:

```
>policy-map type inspect gtp <policy-map-name>
  >parameters
    >gsn-limit 50000
```

Related Commands

Command	Description
policy-map type inspect	When using the Modular Policy Framework, define special actions for inspection of application traffic by using this command.

gtp-u-header-check

To check whether the inner payload of a GTP data packet is a valid IP packet and drop it if it is not, use the **gtp-u-header-check** command in GTP inspection policy map parameters configuration mode. Use the **no** form of this command disable the check.

gtp-u-header-check [**anti-spoofing** [**gtpv2-dhcp-bypass** | **gtpv2-dhcp-drop**] | **gtp-in-gtp-encapsulation**]
no gtp-u-header-check [**anti-spoofing** [**gtpv2-dhcp-bypass** | **gtpv2-dhcp-drop**] | **gtp-in-gtp-encapsulation**]

Syntax Description

anti-spoofing	Checks whether the mobile user IP address in the IP header of the inner payload matches the IP address assigned in GTP control messages such as Create Session Response, and drops the GTP-U message if the IP addresses do not match. This check supports IPv4, IPv6, and IPv4v6 PDN Types. If the mobile station gets its address using DHCP, the end-user IP address in GTPv2 is 0.0.0.0 (IPv4) or *prefix*::0 (IPv6), so in this case, the system updates the end-user IP address with the first IP address found in the inner packets. You can change the default behavior for DHCP-obtained addresses using the **gtpv2-dhcp** keywords.
gtpv2-dhcp-bypass	(Anti-spoofing) Do not update the 0.0.0.0 or *prefix*::0 address. Instead, allow packets where the end-user IP address is 0.0.0.0 or *prefix*::0. This option bypasses the anti-spoofing check when DHCP is used to obtain the IP address.
gtpv2-dhcp-drop	(Anti-spoofing) Do not update the 0.0.0.0 or *prefix*::0 address. Instead, drop all packets where the end-user IP address is 0.0.0.0 or *prefix*::0. This option prevents access for users that use DHCP to obtain the IP address.
gtp-in-gtp-encapsulation	Drop GTP-in-GTP encapsulated packets. This option can help prevent GTP tunneling attacks. The system examines the data payload for GTP ports (UDP/2123 or UDP/2152) as the source or destination port, and drops matching packets. Without this option, GTP-in-GTP encapsulated packets are allowed.

Command Default

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
Parameters configuration mode	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
9.10(1)	This command was introduced.
9.24(1)	The **gtp-in-gtp-encapsulation** was added.

Usage Guidelines

You can use this command to implement anti-spoofing. It is possible for hackers to pretend (spoof) that they are another customer by using another IP address than the one assigned through GTP-C. Anti-spoofing checks whether the GTP-U address used is actually the one which was assigned using GTP-C.

Examples

The following example enables anti-spoofing with the default behavior.

```
ciscoasa(config)# policy-map type inspect gtp gtp-map
ciscoasa(config-pmap)# parameters
ciscoasa(config-pmap-p)# gtp-u-header-check anti-spoofing
```

The following example drops GTP-in-GTP encapsulated packets.

```
ciscoasa(config)# policy-map type inspect gtp gtp-map
ciscoasa(config-pmap)# parameters
ciscoasa(config-pmap-p)# gtp-u-header-check gtp-in-gtp-encapsulation
```

Related Commands

Commands	Description
anti-replay	Enables GTP anti-replay in GTP inspection.
inspect gtp	Enables GTP application inspection.
policy-map type inspect gtp	Creates or edits a GTP inspection policy map.
show service-policy inspect gtp	Displays the GTP configuration and statistics.

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 an H.245 tunnel is detected.
log	Issues a log when an H.245 tunnel is detected.

Command Default

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
7.2(1)	This command was added.

Examples

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

```
ciscoasa(config)# policy-map type inspect h323 h323_map
ciscoasa(config-pmap)# parameters
ciscoasa(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.

hardware-bypass

To enable the hardware bypass on the Cisco ISA 3000 so that traffic continues to flow between an interface pair during a power outage, use the **hardware-bypass** command in global configuration mode. To disable the hardware bypass, use the **no** form of this command.

hardware-bypass GigabitEthernet { **1/1-1/2** | **1/3-1/4** } [**sticky**]
no hardware-bypass GigabitEthernet { **1/1-1/2** | **1/3-1/4** } [**sticky**]



Note This feature is only available on the Cisco ISA 3000 appliance.

Syntax Description

GigabitEthernet {**1/1-1/2** | **1/3-1/4**}	Supported interface pairs are copper GigabitEthernet 1/1 & 1/2; and GigabitEthernet 1/3 & 1/4. If you have a fiber Ethernet model, only the copper Ethernet pair (GigabitEthernet 1/1 & 1/2) supports hardware bypass. Enter this command separately for each pair.
sticky	(Optional) Keeps the appliance in hardware bypass mode after the power comes back and the appliance boots up. In this case, you need to manually turn off the hardware bypass when you are ready using the **no hardware-bypass manual** command; this option lets you control when the brief interruption occurs.

Command Default

Hardware bypass 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
Global configuration	—	• Yes	• Yes	—	—

Command History

Release	Modification
9.4(1.225)	This command was added.

Usage Guidelines

When the hardware bypass is active, no firewall functions are in place, so make sure you understand the risks of allowing traffic through. When the hardware bypass is deactivated, there is a brief connection interruption as the ASA takes over the flows.

Note When the ISA 3000 loses power and goes into hardware bypass mode, only the above interface pairs can communicate; when using the default configuration, inside1 <---> inside2, and outside1 <---> outside2 can no longer communicate. Any existing connections between these interfaces will be lost.

Examples

The following example disables hardware bypass for GigabitEthernet 1/1 and 1/2, and enables it for 1/3 and 1/4:

```
ciscoasa(config)# no hardware-bypass GigabitEthernet 1/1-1/2
ciscoasa(config)# hardware-bypass GigabitEthernet 1/3-1/4
```

Related Commands

Command	Description
hardware-bypass boot-delay	Configures the hardware bypass to remain active until after the ASA FirePOWER module boots up.
hardware-bypass manual	Manually activates or deactivates the hardware bypass.

hardware-bypass boot-delay

To configure the hardware bypass on the Cisco ISA 3000 to remain active until after the ASA Firepower module boots up, use the **hardware-bypass boot-delay** command in global configuration mode. To disable the boot delay, use the **no** form of this command.

hardware-bypass boot-delay module-up sfr
no hardware-bypass boot-delay module-up sfr



Note This feature is only available on the Cisco ISA 3000 appliance.

Syntax Description

module-up sfr	Delays disabling the hardware bypass until after the ASA FirePOWER module boots up.

Command Default

The boot delay 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
Global configuration	—	• Yes	• Yes	—	—

Command History

Release	Modification
9.4(1.225)	This command was added.

Usage Guidelines

You must enable hardware bypass using the **hardware-bypass** command without the **sticky** option for the **hardware-bypass boot-delay** command to operate. Without the **hardware-bypass boot-delay** command, the hardware bypass is likely to become inactive before the ASA FirePOWER module finishes booting up. This scenario can cause traffic to be dropped if you configured the module to fail-close, for example.

Examples

The following example enables hardware bypass (*without* the **sticky** option), and enables the boot delay:

```
ciscoasa(config)# hardware-bypass GigabitEthernet 1/1-1/2
ciscoasa(config)# hardware-bypass GigabitEthernet 1/3-1/4
ciscoasa(config)# hardware-bypass boot-delay module-up sfr
```

Related Commands

Command	Description
hardware-bypass	Configures the hardware bypass for supported interface pairs.
hardware-bypass manual	Manually activates or deactivates the hardware bypass.

hardware-bypass manual

To manually activate or deactivate the hardware bypass on the Cisco ISA 3000, use the **hardware-bypass manual** command in privileged EXEC mode.

hardware-bypass manual GigabitEthernet { **1/1-1/2** | **1/3-1/4** }
no hardware-bypass manual GigabitEthernet { **1/1-1/2** | **1/3-1/4** }

Note This feature is only available on the Cisco ISA 3000 appliance.

Syntax Description

GigabitEthernet {**1/1-1/2** | **1/3-1/4**}	Supported interface pairs are copper GigabitEthernet 1/1 & 1/2; and GigabitEthernet 1/3 & 1/4. If you have a fiber Ethernet model, only the copper Ethernet pair (GigabitEthernet 1/1 & 1/2) supports hardware bypass. Enter this command separately for each pair.

Command Default

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	—	• Yes	• Yes	—	—

Command History

Release	Modification
9.4(1.225)	This command was added.

Usage Guidelines

When you configure the **hardware-bypass** command **sticky** option that keeps bypass enabled, you must use the **hardware-bypass manual** command to deactivate hardware bypass after power is restored.

This command changes the current hardware bypass state. In the event of a power failure, the **hardware-bypass** configuration command actions take priority. For example, if **hardware-bypass** is disabled in the configuration, but you enable hardware bypass manually, then at a power failure, hardware bypass becomes disabled according to the configuration.

Examples

The following example manually deactivates hardware bypass for GigabitEthernet 1/2 and 1/2:

```
ciscoasa# no hardware-bypass manual GigabitEthernet 1/1-1/2
```

Related Commands

Command	Description
hardware-bypass	Configures the hardware bypass for supported interface pairs.
hardware-bypass boot-delay	Configures the hardware bypass to remain active until after the ASA FirePOWER module boots up.

health-check

To enable the cluster health check feature, use the **health-check** command in cluster group configuration mode. To disable the health check, use the **no** form of this command.

health-check [**holdtime** *timeout*] [**vss-enabled**]
no health-check [**holdtime** *timeout*] [**vss-enabled**]

Syntax Description

holdtime *timeout*	Determines the amount of time between keepalive or interface status messages, between .3 (9.8(1) and later or .8 (9.7 and earlier) and 45 seconds. The default is 3 seconds. Note that configuring a lower holdtime will increase CCL messaging and CPU activity. If you downgrade your ASA software after setting the hold time to .3 - .7, this setting will revert to the default of 3 seconds because the new setting is unsupported.
vss-enabled	If you configure the cluster control link as an EtherChannel (recommended), and it is connected to a VSS or vPC pair, then you might need to enable the **vss-enabled** option. For some switches, when one unit in the VSS/vPC is shutting down or booting up, EtherChannel member interfaces connected to that switch may appear to be Up to the ASA, but they are not passing traffic on the switch side. The ASA can be erroneously removed from the cluster if you set the ASA holdtime timeout to a low value (such as .8 seconds), and the ASA sends keepalive messages on one of these EtherChannel interfaces. When you enable **vss-enabled**, the ASA floods the keepalive messages on all EtherChannel interfaces in the cluster control link to ensure that at least one of the switches can receive them.

Command Default

Health check is enabled by default, with a holdtime of 3 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
Cluster group configuration	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
9.0(1)	This command was added.
9.1(4)	The **vss-enabled** keyword was added.
9.8(1)	The **holdtime** minimum value was lowered to .3 seconds.

Usage Guidelines

When any topology changes occur (such as adding or removing a data interface, enabling or disabling an interface on the ASA or the switch, or adding an additional switch to form a VSS or vPC) you should disable the health check feature and also disable interface monitoring for the disabled interfaces (**no health-check**

monitor-interface). When the topology change is complete, and the configuration change is synced to all units, you can re-enable the health check feature.

Keepalive messages between members determine member health. If a unit does not receive any keepalive messages from a peer unit within the holdtime period, the peer unit is considered unresponsive or dead.

Note In 9.8(1), the unit health check messaging scheme was changed to *heartbeats* in the data plane from *keepalives* in the control plane. Using the data plane improves CPU usage and reliability.

This command is not part of the bootstrap configuration, and is replicated from the master unit to the slave units.

Examples

The following example disables the health check:

```
ciscoasa(config)# cluster group cluster1
ciscoasa(cfg-cluster)# no health-check
```

Related Commands

Command	Description
clacp system-mac	When using spanned EtherChannels, the ASA uses cLACP to negotiate the EtherChannel with the neighbor switch.
cluster group	Names the cluster and enters cluster configuration mode.
cluster-interface	Specifies the cluster control link interface.
cluster interface-mode	Sets the cluster interface mode.
conn-rebalance	Enables connection rebalancing.
console-replicate	Enables console replication from slave units to the master unit.
enable (cluster group)	Enables clustering.
health-check auto-rejoin	Customizes the auto-rejoin cluster settings after a health check failure.
health-check	Enables the cluster health check feature, which includes unit health monitoring and interface health monitoring.
key	Sets an authentication key for control traffic on the cluster control link.
local-unit	Names the cluster member.
mtu cluster-interface	Specifies the maximum transmission unit for the cluster control link interface.
priority (cluster group)	Sets the priority of this unit for master unit elections.

health-check application

To enable Cloud Web Security application health checking, use the **health-check application** command in scansafe general-options configuration mode. To remove health checking or return to the default timeout, use the **no** form of this command.

health-check application { [**url** *url_string*] | **timeout** *seconds* }
no health-check application { [**url** *url_string*] | **timeout** *seconds* }

Syntax Description

url *url_string*	(Optional.) Specifies the URL to use when polling the application. If you do not specify a URL, the default URL is used. The default URL is http://gs.scansafe.net/goldStandard?type=text&size=10. Specify a URL only if instructed to do so by Cisco Cloud Web Security.
timeout *seconds*	Specifies how long the ASA waits after sending a GET request for the health check URL to get a response. The ASA retries the request after the timeout up to the retry limit for polling the server before marking the server as down and initiating failover. The default is 15 seconds, the range is 5-120 seconds.

Command Default

Health checking 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
Scansafe general-options configuration	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
9.6(2)	This command was added.

Usage Guidelines

When you subscribe to the Cisco Cloud Web Security service, you are assigned a primary Cloud Web Security proxy server and backup proxy server. These servers are routinely polled to check for their availability. If your ASA is unable to reach the Cloud Web Security proxy server (for example, if no SYN/ACK packets arrive from the proxy server), then the proxy server is polled through a TCP three-way handshake to check its availability. If the proxy server is unavailable after a configured number of retries (the default is five), the server is declared as unreachable, and the backup proxy server becomes active.

You can further refine failover by checking the health of the Cloud Web Security application. In some cases, the server can complete the TCP three-way handshake, yet the Cloud Web Security application on the server is not functioning correctly. If you enable application health checking, the system can fail over to the backup

server even if the three-way handshake completes, if the application itself does not respond. This provides a more reliable failover setup. Use the **health-check application** command to enable this extra check.

Health checking involves sending a GET request with a test URL to the Cloud Web Security application. Failure to respond within the configured timeout and retry limits marks the server as down, and the system initiates failover. The backup server is also tested to ensure that it is functioning correctly before it is marked as the active server. After failover, the application on the primary server is retested every 30 seconds until it comes back online and can be marked the active server again.

The ASA automatically falls back to the primary Cloud Web Security proxy server from the backup server after continued polling shows that the primary server is active for two consecutive retry count periods. You can change this polling interval using the **retry-count** command.

Examples

The following example configures a primary and backup server and enables health checking using the default URL and timeout. You must enter the **health-check application** command separately to enable health checking and to set a non-default timeout.

```
scansafe general-options
 server primary ip 10.24.0.62 port 8080
 server backup ip 10.10.0.7 port 8080
 health-check application
 retry-count 7
 license 366C1D3F5CE67D33D3E9ACEC265261E5
```

Related Commands

Command	Description
class-map type inspect scansafe	Creates an inspection class map for whitelisted users and groups.
default user group	Specifies the default username and/or group if the ASA cannot determine the identity of the user coming into the ASA.
http[**s**] (parameters)	Specifies the service type for the inspection policy map, either HTTP or HTTPS.
inspect scansafe	Enables Cloud Web Security inspection on the traffic in a class.
license	Configures the authentication key that the ASA sends to the Cloud Web Security proxy servers to indicate from which organization the request comes.
match user group	Matches a user or group for a whitelist.
policy-map type inspect scansafe	Creates an inspection policy map so you can configure essential parameters for the rule and also optionally identify the whitelist.
retry-count	Enters the retry counter value, which is the amount of time that the ASA waits before polling the Cloud Web Security proxy server to check its availability.
scansafe	In multiple context mode, allows Cloud Web Security per context.
scansafe general-options	Configures general Cloud Web Security server options.

Command	Description
server {**primary** | **backup**}	Configures the fully qualified domain name or IP address of the primary or backup Cloud Web Security proxy servers.
show conn scansafe	Shows all Cloud Web Security connections, as noted by the capitol Z flag.
show scansafe server	Shows the status of the server, whether it's the current active server, the backup server, or unreachable.
show scansafe statistics	Shows total and current HTTP(S) connections.
user-identity monitor	Downloads the specified user or group information from the AD agent.
whitelist	Performs the whitelist action on the class of traffic.

health-check auto-rejoin

To customize the auto-rejoin cluster settings after a health check failure, use the **health-check auto-rejoin** command in cluster group configuration mode. To restore the default values, use the **no** form of this command.

health-check { **data-interface** | **cluster-interface** | **system** } **auto-rejoin** { **unlimited** | *auto_rejoin_max* } [*auto_rejoin_interval* [*auto_rejoin_interval_variation*]]
no health-check { **data-interface** | **cluster-interface** | **system** } **auto-rejoin** [{ **unlimited** | *auto_rejoin_max* } [*auto_rejoin_interval* [*auto_rejoin_interval_variation*]]]

Syntax Description

auto_rejoin_interval	(Optional) Defines the interval duration in minutes between rejoin attempts, between 2 and 60. The default value is **5** minutes. The maximum total time that the unit attempts to rejoin the cluster is limited to 14400 minutes (10 days) from the time of last failure.
auto_rejoin_interval_variation	(Optional) Defines if the interval duration increases, between 1 and 3: • **1**—No change • **2**—2 x the previous duration • **3**—3 x the previous duration. For example, if you set the interval duration to 5 minutes, and set the variation to **2**, then the first attempt is after 5 minutes; the 2nd attempt is 10 minutes (2 x 5); the 3rd attempt 20 minutes (2 x 10), and so on. The default value is **1** for the cluster-interface and **2** for the data-interface and system.
auto_rejoin_max	Defines the number of attempts at rejoining the cluster, between 0 and 65535. **0** disables auto-rejoining. The default value is **unlimited** for the cluster-interface and **3** for the data-interface and system.
cluster-interface	Sets the auto-rejoin settings for the cluster control link.
data-interface	Sets the auto-rejoin settings for data interfaces.
system	Sets the auto-rejoin settings for internal errors for the system. Internal failures include: application sync timeout; inconsistent application statuses; and so on.
unlimited	Sets the number of attempts at rejoining the cluster to unlimited, the default for the cluster-interface.

Command Default

- The cluster auto-rejoin feature for a failed cluster control link is unlimited attempts every 5 minutes.
- The cluster auto-rejoin feature for a failed data interface is 3 attempts every 5 minutes, with the increasing interval set to 2.
- The cluster auto-rejoin feature for an internal system error is 3 attempts every 5 minutes, with the increasing interval set to 2.

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
Cluster group configuration	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
9.9(2)	Added the **system** keyword.
9.5(1)	This command was added.

Usage Guidelines

This command lets you customize the auto-rejoin options to suit your network conditions.

Examples

The following example configures 10 rejoin attempts for both interface types. For data interfaces, the rejoin interval is 10 minutes, with an interval duration increase of 3 x the interval. for the cluster control link, the rejoin interval is 7 minutes, with an interval duration increase of 2 x the interval.

```
ciscoasa(config)# cluster group pod1
ciscoasa(cfg-cluster)# local-unit unit1
ciscoasa(cfg-cluster)# cluster-interface port-channel1 ip 192.168.1.1 255.255.255.0
ciscoasa(cfg-cluster)# site-id 1
ciscoasa(cfg-cluster)# health-check data-interface auto-rejoin 10 10 3
ciscoasa(cfg-cluster)# health-check cluster-interface auto-rejoin 10 7 2
ciscoasa(cfg-cluster)# priority 1
ciscoasa(cfg-cluster)# key chuntheunavoidable
ciscoasa(cfg-cluster)# enable noconfirm
```

Related Commands

Command	Description
clacp system-mac	When using spanned EtherChannels, the ASA uses cLACP to negotiate the EtherChannel with the neighbor switch.
cluster group	Names the cluster and enters cluster configuration mode.
cluster-interface	Specifies the cluster control link interface.
cluster interface-mode	Sets the cluster interface mode.
conn-rebalance	Enables connection rebalancing.
console-replicate	Enables console replication from slave units to the master unit.
enable (cluster group)	Enables clustering.
health-check	Enables the cluster health check feature, which includes unit health monitoring and interface health monitoring.

Command	Description
key	Sets an authentication key for control traffic on the cluster control link.
local-unit	Names the cluster member.
mac-address site-id	Configures a site-specific MAC address for each site.
mtu cluster-interface	Specifies the maximum transmission unit for the cluster control link interface.
priority (cluster group)	Sets the priority of this unit for master unit elections.
site-id	Sets a site ID to avoid MAC address flapping in inter-site clustering.

health-check chassis-heartbeat-delay-rejoin

To set the chassis rejoin to match the **health-check system auto-rejoin** command for chassis heartbeat failures, use the **health-check chassis-heartbeat-delay-rejoin** command in cluster group configuration mode. To have the chassis rejoin immediately, use the **no** form of this command.

health-check chassis-heartbeat-delay-rejoin
no health-check chassis-heartbeat-delay-rejoin

Syntax Description

This command has no arguments or keywords.

Command Default

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
Cluster group configuration	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
9.20(2)	This command was added.

Usage Guidelines

By default, if the chassis heartbeat fails and then recovers, the node rejoins the cluster immediately. However, if you configure the **health-check chassis-heartbeat-delay-rejoin** command, it will rejoin according to the settings of the **health-check system auto-rejoin** command.

Examples

The following example configures the **health-check system auto-rejoin** and then enables use of those settings for the chassis heartbeat rejoin.

```
ciscoasa(config)# cluster group pod1
ciscoasa(cfg-cluster)# local-unit unit1
ciscoasa(cfg-cluster)# cluster-interface port-channel1 ip 192.168.1.1 255.255.255.0
ciscoasa(cfg-cluster)# site-id 1
ciscoasa(cfg-cluster)# health-check system auto-rejoin 10 10 3
ciscoasa(cfg-cluster)# health-check chassis-heartbeat-delay-rejoin
ciscoasa(cfg-cluster)# priority 1
ciscoasa(cfg-cluster)# key chuntheunavoidable
ciscoasa(cfg-cluster)# enable noconfirm
```

Related Commands

Command	Description
clacp system-mac	When using spanned EtherChannels, the ASA uses cLACP to negotiate the EtherChannel with the neighbor switch.
cluster group	Names the cluster and enters cluster configuration mode.
cluster-interface	Specifies the cluster control link interface.
cluster interface-mode	Sets the cluster interface mode.
conn-rebalance	Enables connection rebalancing.
console-replicate	Enables console replication from slave units to the master unit.
enable (cluster group)	Enables clustering.
health-check	Enables the cluster health check feature, which includes unit health monitoring and interface health monitoring.
key	Sets an authentication key for control traffic on the cluster control link.
local-unit	Names the cluster member.
mac-address site-id	Configures a site-specific MAC address for each site.
mtu cluster-interface	Specifies the maximum transmission unit for the cluster control link interface.
priority (cluster group)	Sets the priority of this unit for master unit elections.
site-id	Sets a site ID to avoid MAC address flapping in inter-site clustering.

health-check monitor-interface

To monitor interfaces, use the **health-check monitor-interface** command in cluster group configuration mode. To disable monitoring, use the **no** form of this command.

health-check monitor-interface { *interface_id* | **service-module** | **service-application** | **debounce-time** }
no health-check monitor-interface { *interface_id* | **service-module** | **service-application** | **debounce-time** }

Syntax Description

interface_id	Enables monitoring on interfaces. You can specify any port-channel ID, redundant ID, or single physical interface ID. Health monitoring is not performed on VLAN subinterfaces or virtual interfaces such as VNIs or BVIs. You cannot configure monitoring for the cluster control link; it is always monitored.
service-application	Enables monitoring of the decorator application on the Firepower 4100/9300.
service-module	Enables monitoring of a software or hardware module on ASA hardware models, such as the ASA FirePOWER module.
debounce-time	Configures the debounce time before the ASA removes a failed interface. Set the debounce time between 300 and 9000 ms. The default is 500 ms. Lower values allow for faster detection of interface failures. Note that configuring a lower debounce time increases the chances of false-positives. When an interface status update occurs, the ASA waits the number of milliseconds specified before removing the interface. In the case of an EtherChannel that transitions from a down state to an up state (for example, the switch reloaded, or the switch enabled an EtherChannel), a longer debounce time can prevent the interface from appearing to be failed on a cluster unit just because another cluster unit was faster at bundling the ports.

Command Default

Interface health monitoring is enabled on all interfaces by default.

The debounce time is 500 ms.

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
Cluster group configuration	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
9.4(1)	This command was added.

Release	Modification
9.5(1)	The **service-module** keyword was added.
9.6(1)	The **service-application** keyword was added.
9.8(1)	The **debounce-time** keyword was added for the Firepower 4100/9300.
9.9(2)	The **debounce-time** keyword was added for ASA appliances.
9.10(1)	The **debounce-time** keyword now applies to interfaces changing from a down state to an up state.

Usage Guidelines

When any topology changes occur (such as adding or removing a data interface, enabling or disabling an interface on the ASA or the switch, or adding an additional switch to form a VSS or vPC) you should disable the health check feature (**no health-check**) and also disable interface monitoring for the disabled interfaces (**no health-check monitor-interface**). When the topology change is complete, and the configuration change is synced to all units, you can re-enable the health check feature.

Interface status messages detect link failure. If an interface fails on a particular unit, but the same interface is active on other units, then the unit is removed from the cluster.

If a unit does not receive interface status messages within the holdtime, then the amount of time before the ASA removes a member from the cluster depends on the type of interface and whether the unit is an established member or is joining the cluster. For EtherChannels (spanned or not), if the interface is down on an established member, then the ASA removes the member after 9 seconds. If the unit is joining the cluster as a new member, the ASA waits 45 seconds before rejecting the new unit. For non-EtherChannels, the unit is removed after 500 ms, regardless of the member state.

This command is not part of the bootstrap configuration, and is replicated from the master unit to the slave units.

Examples

The following example disables the health check:

```
ciscoasa(config)# cluster group cluster1
ciscoasa(cfg-cluster)# no health-check monitor-interface ethernet1/1
```

Related Commands

Command	Description
clacp system-mac	When using spanned EtherChannels, the ASA uses cLACP to negotiate the EtherChannel with the neighbor switch.
cluster group	Names the cluster and enters cluster configuration mode.
cluster-interface	Specifies the cluster control link interface.
cluster interface-mode	Sets the cluster interface mode.
conn-rebalance	Enables connection rebalancing.
console-replicate	Enables console replication from slave units to the master unit.
enable (cluster group)	Enables clustering.

Command	Description
health-check auto-rejoin	Customizes the auto-rejoin cluster settings after a health check failure.
health-check	Enables the cluster health check feature, which includes unit health monitoring and interface health monitoring.
key	Sets an authentication key for control traffic on the cluster control link.
local-unit	Names the cluster member.
mtu cluster-interface	Specifies the maximum transmission unit for the cluster control link interface.
priority (cluster group)	Sets the priority of this unit for master unit elections.

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

as-number	Specifies the autonomous system number of the EIGRP routing process.
seconds	Specifies the interval between hello packets that are sent on the interface. Valid values are from 1 to 65535 seconds.

Command Default

The default 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	• Yes	—	• Yes	• Yes	—

Command History

Release	Modification
8.0(2)	This command was added.
9.0(1)	Support for multiple context mode was added.

Usage Guidelines

The smaller the hello interval, the faster topological changes will be detected, but more routing traffic will occur. 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:

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

Related Commands

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

hello padding multi-point

To enable IS-IS hello padding at the router level, enter the **hello padding multi-point** command in router isis configuration mode. To disable IS-IS hello padding, use the **no** form of this command.

hello padding multi-point
no hello padding multi-point

Syntax Description

This command has no arguments or keywords.

Command Default

Hello padding 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
Router configuration	• Yes	—	• Yes	• Yes	—

Command History

Release	Modification
9.6(1)	This command was added.

Usage Guidelines

This command enables IS-IS hellos to be padded to the full maximum transmission unit (MTU) size. The benefit of padding IS-IS hellos to the full MTU is that it allows for early detection of errors that result from transmission problems with large frames or errors that result from mismatched MTUs on adjacent interfaces.

You can disable hello padding to avoid wasting network bandwidth in case the MTU of both interfaces is the same, or in case of translational bridging. While hello padding is disabled, the ASAs still send the first five IS-IS hellos padded to the full MTU size to maintain the benefits of discovering MTU mismatches.

To disable hello padding for all interfaces on an ASA for the IS-IS routing process, enter the **no hello padding multi-point** command in router configuration mode. To selectively disable hello padding for a specific interface, enter the **no isis hello padding** command in interface configuration mode.

Examples

In the following example the **no hello padding multi-point** command is used to turn off hello padding at the router level:

```
ciscoasa(config)# router isis
ciscoasa(config-router)# hello padding multi-point
```

Related Commands

Command	Description
advertise passive-only	Configures the ASA to advertise passive interfaces.

Command	Description
area-password	Configures an IS-IS area authentication password.
authentication key	Enables authentication for IS-IS globally.
authentication mode	Specifies the type of authentication mode used in IS-IS packets for the IS-IS instance globally.
authentication send-only	Configure the IS-IS instance globally to have authentication performed only on IS-IS packets being sent (not received).
clear isis	Clears IS-IS data structures.
default-information originate	Generates a default route into an IS-IS routing domain.
distance	Defines the administrative distance assigned to routes discovered by the IS-IS protocol.
domain-password	Configures an IS-IS domain authentication password.
fast-flood	Configures IS-IS LSPs to be full.
hello padding	Configures IS-IS hellos to the full MTU size.
hostname dynamic	Enables IS-IS dynamic hostname capability.
ignore-lsp-errors	Configures the ASA to ignore IS-IS LSPs that are received with internal checksum errors rather than purging the LSPs.
isis adjacency-filter	Filters the establishment of IS-IS adjacencies.
isis advertise-prefix	Advertises IS-IS prefixes of connected networks in LSP advertisements on an IS-IS interface.
isis authentication key	Enables authentication for an interface.
isis authentication mode	Specifies the type of authentication mode used in IS-IS packets for the IS-IS instance per interface
isis authentication send-only	Configure the IS-IS instance per interface to have authentication performed only on IS-IS packets being sent (not received).
isis circuit-type	Configures the type of adjacency used for the IS-IS.
isis csnp-interval	Configures the interval at which periodic CSNP packets are sent on broadcast interfaces.
isis hello-interval	Specifies the length of time between consecutive hello packets sent by IS-IS.
isis hello-multiplier	Specifies the number of IS-IS hello packets a neighbor must miss before the ASA declares the adjacency as down.
isis hello padding	Configures IS-IS hellos to the full MTU size per interface.

Command	Description
isis lsp-interval	Configures the time delay between successive IS-IS LSP transmissions per interface.
isis metric	Configures the value of an IS-IS metric.
isis password	Configures the authentication password for an interface.
isis priority	Configures the priority of designated ASAs on the interface.
isis protocol shutdown	Disables the IS-IS protocol per interface.
isis retransmit-interval	Configures the amount of time between retransmission of each IS-IS LSP on the interface.
isis retransmit-throttle-interval	Configures the amount of time between retransmissions of each IS-IS LSP on the interface.
isis tag	Sets a tag on the IP address configured for an interface when the IP prefix is put into an LSP.
is-type	Assigns the routing level for the IS-IS routing process.
log-adjacency-changes	Enables the ASA to generate a log message when an NLSP IS-IS adjacency changes state (up or down).
lsp-full suppress	Configures which routes are suppressed when the PDU becomes full.
lsp-gen-interval	Customizes IS-IS throttling of LSP generation.
lsp-refresh-interval	Sets the LSP refresh interval.
max-area-addresses	Configures additional manual addresses for an IS-IS area.
max-lsp-lifetime	Sets the maximum time that LSPs persist in the ASA's database without being refreshed.
maximum-paths	Configures multi-path load sharing for IS-IS.
metric	Globally changes the metric value for all IS-IS interfaces.
metric-style	Configures an ASA running IS-IS so that it generates and only accepts new-style, length, value objects (TLVs).
net	Specifies the NET for the routing process.
passive-interface	Configures a passive interface.
prc-interval	Customizes IS-IS throttling of PRCs.
protocol shutdown	Disables the IS-IS protocol globally so that it cannot form any adjacency on any interface and will clear the LSP database.
redistribute isis	Redistributes IS-IS routes specifically from Level 1 into Level 2 or from Level 2 into Level 1.

Command	Description
route priority high	Assigns a high priority to an IS-IS IP prefix.
router isis	Enables IS-IS routing.
set-attached-bit	Specifies constraints for when a Level 1-Level 2 router should set its attached bit.
set-overload-bit	Configures the ASA to signal other routers not to use it as an intermediate hop in their SPF calculations.
show clns	Shows CLNS-specific information.
show isis	Shows IS-IS information.
show route isis	Shows IS-IS routes.
spf-interval	Customizes IS-IS throttling of SPF calculations.
summary-address	Creates aggregate addresses for IS-IS.

help

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

help { *command* | **?** }

Syntax Description

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

Command Default

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	• Yes	• Yes	• Yes	• Yes	• Yes

Command History

Release	Modification
7.0(1)	This command was added.

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 after 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:

```
ciscoasa
#
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
ciscoasa
#
```

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

```
ciscoasa(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:

```
ciscoasa(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.

hidden-parameter

To specify hidden parameters in the HTTP POST request that the ASA 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*
nohidden-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

string 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.

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.1(1)	This command was added.

Usage Guidelines

This is an SSO with HTTP Forms command.

The WebVPN server of the ASA uses an HTTP POST request to submit an SSO authentication request to an authenticating web server. That request may require specific hidden parameters from the SSO HTML form—other then 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 **hidden-parameter** command lets you specify a hidden parameter that the web server requires in the authentication POST request. If you use a header analyzer, you can copy and paste the entire hidden parameter string, including any encoded URL parameters.

For ease of entry, you can enter a hidden parameter on multiple, sequential lines. The ASA 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

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

Related Commands

Command	Description
action-uri	Specifies a web server URI to receive a username and password for SSO 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 prelogin 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 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.

Command Default

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
8.0(2)	This command was added.

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:

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

Related Commands

Command	Description
debug webvpn cifs	Displays debugging messages about the CIFS.
group-policy attributes	Enters group-policy configuration mode, which lets you configure attributes and values for a specified group policy or lets you enter webvpn configuration mode to configure WebVPN attributes for the group.
url-list	Configures a set of URLs for WebVPN users to access.
url-list	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 ASA 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

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

Command Default

The default 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	• Yes	—	• Yes	• Yes	—

Command History

Release	Modification
8.0(2)	This command was added.
9.0(1)	Support for multiple context mode was added.

Usage Guidelines

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

```
ciscoasa(config-if)# hello-interval eigrp 100 10
ciscoasa(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 configuration 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.

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 a home page.
value *url-string*	Provides a URL for the home page. The string must begin with either http:// or https://.

Command Default

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 configuration	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.0(1)	This command was added.

Usage Guidelines

To specify a home page 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. The **no** option allows inheritance of a value from another group policy. To prevent inheriting a home page, use the **homepage none** command.

Clientless users are immediately brought to this page after successful authentication. Secure Client launches the default web browser to this URL upon successful establishment of the VPN connection. On Linux platforms, Secure Client 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:

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

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

Related Commands

Command	Description
webvpn	Lets you enter webvpn configuration mode to configure parameters that apply to group policies or usernames.

homepage use-smart-tunnel

To allow the group policy home page to use the smart tunnel feature when clientless SSL VPN is used, use the **homepage use-smart-tunnel** command in the group-policy webvpn configuration mode.

homepage { **value** *url-string* | **none** }
homepage use-smart-tunnel

Syntax Description

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

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
8.3(1)	This command was added.

Usage Guidelines

You can use the HTTP capture tool to monitor the browser session and verify that the smart tunnel was initiated during the WebVPN connection. What you see in the browser capture determines whether the request is forwarded to the web page without degradation and whether the smart tunnel is used. If you see something like https://172.16.16.23/+CSCOE+portal.html, the *+CSCO** indicates that the content is degraded by the ASA. When the smart tunnel is initiated, you see an **http get** command to a specific URL without the +CSCO* (such as GET 200 html http://mypage.example.com).

Examples

If you consider a case where Vendor V wants to provide Partner P with clientless access to their internal inventory server pages, Vendor V's administrator must decide the following:

- Will users have access to the inventory pages after they log into a clientless SSL VPN, whether or not they go through the clientless portal?
- Will the smart tunnel be a good choice for access because the page includes a Microsoft Silverlight component?

- Is a tunnel-all policy suitable because once the browser has been tunneled, all tunnel policy forces all browser traffic to go through Vendor V's ASA, leaving Partner P's users with no access to internal resources?

With the assumption that inventory pages are hosted at inv.example.com (10.0.0.0), the following example creates a tunnel policy that contains only one host:

```
ciscoasa(config-webvpn)# smart-tunnel network inventory ip 10.0.0.0
ciscoasa(config-webvpn)# smart-tunnel network inventory host inv.example.com
```

The following example applies a tunnel-specified tunnel policy to the partner's group policy:

```
ciscoasa(config-group-webvpn)# smart-tunnel tunnel-policy tunnelspecified inventory
```

The following example specifies the group policy home page and enables a smart tunnel on it:

```
ciscoasa(config-group-webvpn)# homepage value http://inv.example.com
ciscoasa(config-group-webvpn)# homepage use-smart-tunnel
```

host (network object)

To configure a host for a network object, use the **host** command in object network configuration mode. To remove the host from the object, use the **no** form of this command.

host*ip_address*
no host *ip_address*

Syntax Description

ip_address	Identifies the host IP address for the object, either IPv4 or IPv6.

Command Default

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
Object configuration	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
8.3(1)	This command was added.

Usage Guidelines

If you configure an existing network object with a different IP address, the new configuration will replace the existing configuration.

Examples

The following example shows how to create a host network object:

```
ciscoasa (config)# object network OBJECT1
ciscoasa (config-network-object)# host 10.1.1.1
```

Related Commands

Command	Description
clear configure object	Clears all objects created.
nat	Enables NAT for the network object.
object network	Creates a network object.
object-group network	Creates a network object group.
show running-config object network	Shows the network object configuration.

host (parameters)

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 the specified host, use the **no** form of this command.

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

Syntax Description

host	Specifies a single endpoint sending the RADIUS accounting messages.
address	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.
secret	The shared secret key of the endpoint sending the accounting messages used to validate the messages. This can be up to 128 alphanumeric characters.

Command Default

The **no** option 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
Radius-accounting parameters configuration	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
7.2(1)	This command was added.

Usage Guidelines

Multiple instances of this command are allowed.

Examples

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

```
ciscoasa(config)# policy-map type inspect radius-accounting ra
ciscoasa(config-pmap)# parameters
ciscoasa(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 ASA hostname, use the **hostname** command in global configuration mode. To restore the default hostname, use the **no** form of this command.

hostname*name*
no hostname [*name*]

Syntax Description

name	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.

Command Default

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	• Yes	• Yes	• Yes	• Yes	• Yes

Command History

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

Usage Guidelines

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. 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:

```
ciscoasa(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.

hostname dynamic

To enable IS-IS dynamic hostname capability on the ASA, use the **hostname dynamic** command in router isis configuration mode. To disable the dynamic hostname feature, use the **no** form of this command.

hostname dynamic
no hostname dynamic

Syntax Description

This command has no arguments or keywords.

Command Default

The dynamic hostname 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
Router isis configuration	• Yes	—	• Yes	• Yes	—

Command History

Release	Modification
9.6(1)	This command was added.

Usage Guidelines

In the IS-IS routing domain, the system ID is used to represent each ASA. The system ID is part of the network entity title (NET) that is configured for each IS-IS ASA. For example, an ASA with a configured NET of 49.0001.0023.0003.000a.00 has a system ID of 0023.0003.000a. Router-name-to-system-ID mapping is difficult for network administrators to remember during maintenance and troubleshooting on the routers. Entering the **show isis hostname** command displays the entries in the system-ID-to-router-name mapping table.

The dynamic hostname mechanism uses link-state protocol (LSP) flooding to distribute the router-name-to-system-ID mapping information across the entire network. Every ASA on the network will try to install the system ID-to-router name mapping information in its routing table.

If an ASA that has been advertising the dynamic name type, length, value (TLV) on the network suddenly stops the advertisement, the mapping information last received remains in the dynamic host mapping table for up to one hour, which allows the network administrator to display the entries in the mapping table during a time when the network experiences problems. Entering the **show isis hostname** command displays the entries in the mapping table.

Examples

The following example sets the hostname to firewall1:

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

Related Commands

Command	Description
advertise passive-only	Configures the ASA to advertise passive interfaces.
area-password	Configures an IS-IS area authentication password.
authentication key	Enables authentication for IS-IS globally.
authentication mode	Specifies the type of authentication mode used in IS-IS packets for the IS-IS instance globally.
authentication send-only	Configure the IS-IS instance globally to have authentication performed only on IS-IS packets being sent (not received).
clear isis	Clears IS-IS data structures.
default-information originate	Generates a default route into an IS-IS routing domain.
distance	Defines the administrative distance assigned to routes discovered by the IS-IS protocol.
domain-password	Configures an IS-IS domain authentication password.
fast-flood	Configures IS-IS LSPs to be full.
hello padding	Configures IS-IS hellos to the full MTU size.
hostname dynamic	Enables IS-IS dynamic hostname capability.
ignore-lsp-errors	Configures the ASA to ignore IS-IS LSPs that are received with internal checksum errors rather than purging the LSPs.
isis adjacency-filter	Filters the establishment of IS-IS adjacencies.
isis advertise-prefix	Advertises IS-IS prefixes of connected networks in LSP advertisements on an IS-IS interface.
isis authentication key	Enables authentication for an interface.
isis authentication mode	Specifies the type of authentication mode used in IS-IS packets for the IS-IS instance per interface
isis authentication send-only	Configure the IS-IS instance per interface to have authentication performed only on IS-IS packets being sent (not received).
isis circuit-type	Configures the type of adjacency used for the IS-IS.
isis csnp-interval	Configures the interval at which periodic CSNP packets are sent on broadcast interfaces.
isis hello-interval	Specifies the length of time between consecutive hello packets sent by IS-IS.
isis hello-multiplier	Specifies the number of IS-IS hello packets a neighbor must miss before the ASA declares the adjacency as down.

Command	Description
isis hello padding	Configures IS-IS hellos to the full MTU size per interface.
isis lsp-interval	Configures the time delay between successive IS-IS LSP transmissions per interface.
isis metric	Configures the value of an IS-IS metric.
isis password	Configures the authentication password for an interface.
isis priority	Configures the priority of designated ASAs on the interface.
isis protocol shutdown	Disables the IS-IS protocol per interface.
isis retransmit-interval	Configures the amount of time between retransmission of each IS-IS LSP on the interface.
isis retransmit-throttle-interval	Configures the amount of time between retransmissions of each IS-IS LSP on the interface.
isis tag	Sets a tag on the IP address configured for an interface when the IP prefix is put into an LSP.
is-type	Assigns the routing level for the IS-IS routing process.
log-adjacency-changes	Enables the ASA to generate a log message when an NLSP IS-IS adjacency changes state (up or down).
lsp-full suppress	Configures which routes are suppressed when the PDU becomes full.
lsp-gen-interval	Customizes IS-IS throttling of LSP generation.
lsp-refresh-interval	Sets the LSP refresh interval.
max-area-addresses	Configures additional manual addresses for an IS-IS area.
max-lsp-lifetime	Sets the maximum time that LSPs persist in the ASA's database without being refreshed.
maximum-paths	Configures multi-path load sharing for IS-IS.
metric	Globally changes the metric value for all IS-IS interfaces.
metric-style	Configures an ASA running IS-IS so that it generates and only accepts new-style, length, value objects (TLVs).
net	Specifies the NET for the routing process.
passive-interface	Configures a passive interface.
prc-interval	Customizes IS-IS throttling of PRCs.
protocol shutdown	Disables the IS-IS protocol globally so that it cannot form any adjacency on any interface and will clear the LSP database.

Command	Description
redistribute isis	Redistributes IS-IS routes specifically from Level 1 into Level 2 or from Level 2 into Level 1.
route priority high	Assigns a high priority to an IS-IS IP prefix.
router isis	Enables IS-IS routing.
set-attached-bit	Specifies constraints for when a Level 1-Level 2 router should set its attached bit.
set-overload-bit	Configures the ASA to signal other routers not to use it as an intermediate hop in their SPF calculations.
show clns	Shows CLNS-specific information.
show isis	Shows IS-IS information.
show route isis	Shows IS-IS routes.
spf-interval	Customizes IS-IS throttling of SPF calculations.
summary-address	Creates aggregate addresses for IS-IS.

hostscan enable

To enable hostscan for clientless SSL VPN remote access or remote access using the Secure Client, use the hostscan enable command in webvpn configuration mode. To disable hostscan, use the **no** form of this command.

hostscan enable
no hostscan enable

Syntax Description

This command has no arguments or keywords.

Command Default

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
Webvpn configuration mode	• Yes	—	• Yes	—	—

Command History

Release	Modification
9.5(2)	This command was added.

Usage Guidelines

Hostscan is enabled or disabled globally for all remote access connection attempts made to the ASA with one exception.

The **hostscan enable** command does the following:

1. Provides a validity check that supplements the check performed by the previous hostscan image *path* command.
2. Creates an sdesktop folder on disk0: if one is not already present.
3. Inserts a data.xml (Hostscan configuration) file in the sdesktop folder if one is not already present.
4. Loads the data.xml from the flash device to the running configuration.
5. Enables Hostscan.



Note You can enter the **show webvpn hostscan** command to determine whether or not hostscan is enabled.

- The hostscan image *path* command must be in the running configuration before you enter the **hostscan enable** command.
- The **no hostscan enable** command disables Hostscan in the running configuration. If Hostscan is disabled, you cannot access Hostscan Manager and remote users cannot use Hostscan.
- If you transfer or replace the data.xml file, disable and then enable Hostscan to load the file into the running configuration.
- Hostscan is enabled or disabled globally for all remote access connection attempts made to the ASA. You cannot enable or disable Hostscan for an individual connection profile or group policy.

Exception: Connection profiles for clientless SSL VPN connections can be configured so that Hostscan will not run on the client computer if the computer is attempting to connect to the ASA using a group URL and Hostscan is enabled globally. For example:

ciscoasa(config)# **tunnel-group***group-name***webvpn-attributes**

ciscoasa(config-tunnel-webvpn)# **group-url https://www.url-string.com**

ciscoasa(config-tunnel-webvpn)# without-Hostscan

Examples

The following commands shows how to view the status of the hostscan image and enable it:

```
ciscoasa(config-webvpn)# show webvpn hostscan
Hostscan is not enabled.
ciscoasa(config-webvpn)# hostscan enable
ciscoasa(config-webvpn)# show webvpn hostscan
Hostscan version 4.1.0.25 is currently installed and enabled.
ciscoasa(config-webvpn)#
```

Related Commands

Command	Description
hostscan image	Copies the hostscan image named in the command from the flash drive specified in the path to the running configuration.
show webvpn hostscan	Identifies the version of Hostscan if it is enabled. Otherwise, the CLI indicates "Secure Desktop is not enabled."
without-Hostscan	Configures connection profiles for clientless SSL VPN sessions so that hostscan will not run on the client computer if the computer is attempting to connect to the ASA using a group URL and Hostscan is enabled globally.

hostscan image

To install or upgrade the Cisco Host Scan distribution package and add it to the running configuration, use the hostscan image command in webvpn configuration mode. To remove the Host Scan distribution package from the running configuration, use the **no** form of this command:

hostscan image *path*
no hostscan image *path*

Syntax Description

path Specifies the path and filename of the Cisco Host Scan package, up to 255 characters.

The Host Scan package can be a standalone Host Scan package that can be downloaded from Cisco.com and has the file name convention, hostscan-version.pkg, or it can be the full Secure Client package that can also be downloaded from Cisco.com and has the file name convention, anyconnect-win-version-k9.pkg. When customers specify the Secure Client, the ASA extracts the Host Scan package from the Secure Client package and installs it.

The Host Scan package contains the Host Scan software as well as the Host Scan library and support charts.

Command Default

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
Webvpn configuration	• Yes	—	• Yes	—	—

Command History

Release	Modification
9.5(2)	This command was added.

Usage Guidelines

Enter the **show webvpn hostscan** command to determine the version of the Host Scan image that is currently installed and enabled.

After installing Host Scan with the **hostscan image** command, enable the image using the enable command.

Enter the **write memory** command to save the running configuration to ensure that the Host Scan image is available the next time that the ASA reboots.

Examples

The following commands show how to install a Cisco Host Scan package, enable it, view it, and save the configuration on the flash drive:

```
ciscoasa> en
```

```
Password: ******
ciscoasa# config t
ciscoasa(config)# webvpn
ciscoasa(config-webvpn)# show webvpn hostscan
Hostscan is not enabled.
ciscoasa(config-webvpn)# hostscan image disk0:/hostscan_3.0.0333-k9.pkg

ciscoasa(config-webvpn)# hostscan enable
ciscoasa(config-webvpn)# show webvpn hostscan
Hostscan version 3.0.0333 is currently installed and enabled
ciscoasa(config-webvpn)# write memory
Building configuration...
Cryptochecksum: 2e7126f7 71214c6b 6f3b28c5 72fa0a1e
22067 bytes copied in 3.460 secs (7355 bytes/sec)
[OK]
ciscoasa(config-webvpn)#
```

Related Commands

Command	Description
show webvpn hostscan	Identifies the version of Cisco Host Scan if it is enabled. Otherwise, the CLI indicates "Hostscan is not enabled."
hostscan enable	Enables Hostscan for management and remote user access.

hpm topn enable

To enable real-time reports in ASDM of the top hosts connecting through the ASA, use the **hpm topn enable** command in global configuration mode. To disable the hosts reporting, use the **no** form of this command.

hpm topn enable
no hpm topn enable

Syntax Description

This command has no arguments or keywords.

Command Default

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
Global configuration	• Yes	• Yes	• Yes	—	—

Command History

Release	Modification
8.3(1)	This command was added.

Usage Guidelines

You might want to disable this command to maximize system performance. This command populates the ASDM Home > Firewall Dashboard > Top 200 Hosts pane.

Examples

The following example enables the top hosts reporting:

```
ciscoasa(config)# hpm topn enable
```

Related Commands

Command	Description
clear configure hpm	Clears the HPM configuration.
show running-config hpm	Shows the HPM configuration.

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

ip_address	IP address of the host to add. A maximum of five HSIs per HSI group is allowed.

Command Default

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
7.2(1)	This command was added.

Examples

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

```
ciscoasa(config-pmap-p)# hsi-group 10
ciscoasa(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, from 0 to 2147483647.

Command Default

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
7.2(1)	This command was added.

Examples

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

```
ciscoasa(config-pmap-p)# hsi-group 10
ciscoasa(config-h225-map-hsi-grp)# hsi 10.10.15.11
ciscoasa(config-h225-map-hsi-grp)# endpoint 10.3.6.1 inside
ciscoasa(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.

hsts enable

To configure sending the HTTP Strict Transport Security Header to browsers and other user agents, use the **hsts enable** command in webvpn configuration mode. To remove this setting from the configuration use the no form of this command. Once enabled, compliant browsers and user agents will switch to HTTPS if access is attempted in an unsecured manner.

hsts enable
no hsts enable

Syntax Description

This command has no arguments or keywords.

Command Default

By default, the Strict Transport Security Header is not used.

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
9.8(2)	This command was introduced.

Usage Guidelines

HTTP Strict Transport Security (HSTS) is a web security policy mechanism which helps to protect websites against protocol downgrade attacks and cookie hijacking. It allows web servers to declare that web browsers (or other complying user agents) should only interact with it using secure HTTPS connections, and never via the insecure HTTP protocol.

When enabled, the default timeout value if of 10,886,400 seconds (18weeks) is used. This can be changed using the **hsts max-age** command.

Examples

```
ciscoasa
(config)#
 webvpn
ciscoasa(config-webvpn)# hsts enable
ciscoasa(config-webvpn)#
```

Related Commands

Command	Description
hsts max-age	Maximum amount of time the ASA will be treated as an HSTS host and accessed securely.

Command	Description
show running-config webvpn hsts	Displays the running configuration for SSL VPN, including any HTTP settings.

hsts max-age

When configured to send the HTTP Strict Transport Security Header to browsers or other user agents, (using the **hsts enable** command), **hsts max-age** sets the maximum amount of time the ASA will be treated as an HSTS host and accessed securely

hsts max-age *max-value-in-seconds*

Syntax Description

max-value-in-seconds	The amount of time in seconds that HSTS will be in effect. Range is from <0-31536000> seconds.

Command Default

By default, the maximum is 10,886,400 (18 weeks).

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
9.8(2)	This command was introduced.

Usage Guidelines

HTTP Strict Transport Security (HSTS) is a web security policy mechanism which helps to protect websites against protocol downgrade attacks and cookie hijacking. It allows web servers to declare that web browsers (or other complying user agents) should only interact with it using secure HTTPS connections, and never via the insecure HTTP protocol.

When enabled, the default timeout value of 10,886,400 seconds (18weeks) is used. This command alters the timeout.

Examples

```
ciscoasa
(config)#
 webvpn
ciscoasa(config-webvpn)# hsts max-age 31536000
ciscoasa(config-webvpn)#
```

Related Commands

Command	Description
hsts enable	Enables sending of the HSTS Header.

Command	Description
show running-config webvpn hsts	Displays the running configuration for SSL VPN, including any HTTP settings.

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 <IMG> tags).
java	Removes references to Java and ActiveX (removes the <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).

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.0(1)	This command was added.

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:

```
ciscoasa
```

```
(config)#
 group-policy FirstGroup attributes
ciscoasa
(config-group-policy)#
 webvpn
ciscoasa(config-group-webvpn)# html-content-filter java cookies images
```

Related Commands

Command	Description
webvpn	Lets you enter webvpn configuration mode to configure parameters that apply to group policies or usernames. Lets you enter global configuration mode to configure global settings for WebVPN.

http (global)

To specify hosts that can access the HTTP server internal to the ASA, 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_addresssubnet_maskinterface_name*
no http

Syntax Description

interface_name	Provides the name of the ASA interface through which the host can access the HTTP server. A physical or virtual interface can be specified. if a BVI interface is specified, **managenent-access** must be configured on that interface.
ip_address	Provides the IP address of a host that can access the HTTP server.
subnet_mask	Provides the subnet mask of a host that can access the HTTP server.

Command Default

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
7.0(1)	This command was added.
9.7(1)	If you have a directly-connected HTTP management station, you can use a /31 subnet on the ASA and the host to create a point-to-point connection.
9.9.(2)	Virtual interfaces can now be specified.

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:

```
ciscoasa(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:

```
ciscoasa(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 ASA.
http redirect	Specifies that the ASA 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[s] (parameters)

To specify the service type for the scansafe inspection policy map, use the **http**[**s**] command in parameters configuration mode. To remove the service type, use the **no** form of this command. You can access the parameters configuration mode by first entering the **policy-map type inspect scansafe** command.

{ **http** | **https** }
no { **http** | **https** }

Syntax Description

This command has no arguments or keywords.

Command Default

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
9.0(1)	This command was added.

Usage Guidelines

You can only specify one service type for a Scansafe inspection policy map, either **http** or **https**. There is no default; you must specify a type.

Examples

The following example creates an inspection policy map, and sets the service type to HTTP:

```
ciscoasa(config)# policy-map type inspect scansafe cws_inspect_pmap1
ciscoasa(config-pmap)# parameters
ciscoasa(config-pmap-p)# http
```

Related Commands

Command	Description
class-map type inspect scansafe	Creates an inspection class map for whitelisted users and groups.
default user group	Specifies the default username and/or group if the ASA cannot determine the identity of the user coming into the ASA.
http[**s**] (parameters)	Specifies the service type for the inspection policy map, either HTTP or HTTPS.
inspect scansafe	Enables Cloud Web Security inspection on the traffic in a class.

Command	Description
license	Configures the authentication key that the ASA sends to the Cloud Web Security proxy servers to indicate from which organization the request comes.
match user group	Matches a user or group for a whitelist.
policy-map type inspect scansafe	Creates an inspection policy map so you can configure essential parameters for the rule and also optionally identify the whitelist.
retry-count	Enters the retry counter value, which is the amount of time that the ASA waits before polling the Cloud Web Security proxy server to check its availability.
scansafe	In multiple context mode, allows Cloud Web Security per context.
scansafe general-options	Configures general Cloud Web Security server options.
server {**primary** | **backup**}	Configures the fully qualified domain name or IP address of the primary or backup Cloud Web Security proxy servers.
show conn scansafe	Shows all Cloud Web Security connections, as noted by the capitol Z flag.
show scansafe server	Shows the status of the server, whether it's the current active server, the backup server, or unreachable.
show scansafe statistics	Shows total and current http connections.
user-identity monitor	Downloads the specified user or group information from the AD agent.
whitelist	Performs the whitelist action on the class of traffic.

http authentication-certificate

To require a certificate for authentication with ASDM HTTPS connections, use the **http authentication-certificate** command in global configuration mode. To remove the attribute from the configuration, use the **no** version of this command.

http authentication-certificate *interface name* [**match** *certificate_map_name*]
no http authentication-certificate [*interface* [**match** *certificate_map_name*]]

Syntax Description

interface	Specifies the interface on the ASA that requires certificate authentication.
match *certificate_map_name*	Requires the certificate to match a certificate map. Configure the map using the **crypto ca certificate map** command.

Command Default

HTTP certificate authentication 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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.0(1)	This command was added.
8.0.3	This command was deprecated in favor of the **ssl certificate-authentication** command.
8.2.1	This command was re-added; the global **ssl certificate-authentication** command was kept for backwards compatibility.
8.4.7, 9.1.3	Certificate-only authentication was enabled. Previously, this command only added certificate authentication to user authentication when you enabled the **aaa authentication http console** command.
9.6(2)	We added the **match** *certificate_map_name* option.

Usage Guidelines

You can require certificate authentication, with or without AAA authentication. You configure certificate authentication for each interface, so 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 ASA validates certificates against the PKI trust points. If a certificate does not pass validation, the ASA closes the SSL connection.

Examples

The following example shows how to require certificate authentication for clients connecting to the interfaces named outside and external:

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

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 ASA interface through which the host accesses the HTTP server.
http redirect	Specifies that the ASA 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 authentication-certificate	To require a certificate for SSL connections.

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 have the value 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.

Command Default

By default, compression is set to enabled.

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	• Yes	—	• Yes	—	—
Username webvpn configuration	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.1(1)	This command was added.

Usage Guidelines

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

Examples

The following example disables compression for the group-policy sales:

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

Related Commands

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

http connection idle-timeout

To set an idle timeout for HTTPS connections to the ASA, including ASDM, clientless VPN, Secure Client, and other clients, use the **http connection idle-timeout** command in global configuration mode. To disable the timeout, use the **no** form of this command.

http connection idle-timeout *seconds*
no http connection idle-timeout

Syntax Description

seconds	The idle timeout, from10-86400 seconds.

Command Default

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
Global configuration	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
9.14(1)	This command was added.

Usage Guidelines

The ASA disconnects a connection that is idle for the set period of time. If you set both the **http server idle-timeout** and the **http connection idle-timeout** commands, the **http connection idle-timeout** command takes precedence.

Examples

The following example sets the idle timeout for HTTPS sessions to 600 seconds:

```
ciscoasa(config)# http connection idle-timeout 600
```

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 and the 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 ASA.

Command	Description
http server enable	Enables the HTTP server for ASDM sessions.
http server idle-timeout	Sets the ASDM idle timeout.
http server session-timeout	Limits the session time of ASDM sessions to the ASA.
http redirect	Specifies that the ASA 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.

http-only-cookie

To enable the httponly flag for a Clientless SSL VPN session cookie, use the **http-only-cookie** command in webvpn configuration mode. To remove the flag from the configuration, use the **no** form of this command.

http-only-cookie
no http-only-cookie

Syntax Description

This command has no arguments or keywords.

Command Default

The httponly flag 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
Webvpn configuration	• Yes	—	• Yes	—	—

Command History

Release	Modification
9.2(3)	This command was introduced.

Usage Guidelines

Embedded objects such as Flash applications and Java applets, as well as external applications, usually rely on an existing session cookie to work with the server. They get it from a browser using some Javascript on initialization. Adding the httponly flag to the Clientless SSL VPN session cookie makes the session cookie only visible to the browser, not the client-side scripts, and it makes session sharing impossible.

Change the VPN session cookie setting only when there are no active Clientless SSL VPN sessions Use the **show vpn-sessiondb webvpn** command to check the status of Clientless SSL VPN sessions. Use the **vpn-sessiondb logoff webvpn** command to log out of all Clientless SSL VPN sessions.

The following Clientless SSL VPN features will not work when the **http-only-cookie** command is enabled:

- Java plug-ins
- Java rewriter
- Port forwarding
- File browser
- Sharepoint features that require desktop applications (for example, MS Office applications)
- AnyConnect Web launch
- Citrix Receiver, XenDesktop, and Xenon

- Other non-browser-based and browser plugin-based applications

Note Use this command only if Cisco TAC advises you to do so. Enabling this command presents a security risk.

Examples

The following example shows how to enable the httponly flag for a Clientless SSL VPN session cookie:

```
ciscoasa
(config)#
 webvpn
ciscoasa(config-webvpn)# http-only-cookie
ciscoasa(config-webvpn)
```

Related Commands

Command	Description
show running-config webvpn	Displays the running configuration for Clientless SSL VPN.

http-only-cookie

To enable the httponly flag for a Clientless SSL VPN session cookie, use the **http-only-cookie** command in webvpn configuration mode. To remove the flag from the configuration, use the **no** form of this command.

http-only-cookie
no http-only-cookie

Syntax Description

This command has no arguments or keywords.

Command Default

The httponly flag 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
Webvpn configuration	• Yes	—	• Yes	—	—

Command History

Release	Modification
9.2(3)	This command was introduced.

Usage Guidelines

Embedded objects such as Flash applications and Java applets, as well as external applications, usually rely on an existing session cookie to work with the server. They get it from a browser using some Javascript on initialization. Adding the httponly flag to the Clientless SSL VPN session cookie makes the session cookie only visible to the browser, not the client-side scripts, and it makes session sharing impossible.

Change the VPN session cookie setting only when there are no active Clientless SSL VPN sessions Use the **show vpn-sessiondb webvpn** command to check the status of Clientless SSL VPN sessions. Use the **vpn-sessiondb logoff webvpn** command to log out of all Clientless SSL VPN sessions.

The following Clientless SSL VPN features will not work when the **http-only-cookie** command is enabled:

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- Port forwarding
- File browser
- Sharepoint features that require desktop applications (for example, MS Office applications)
- AnyConnect Web launch
- Citrix Receiver, XenDesktop, and Xenon

- Other non-browser-based and browser plugin-based applications

Note Use this command only if Cisco TAC advises you to do so. Enabling this command presents a security risk.

Examples

The following example shows how to enable the httponly flag for a Clientless SSL VPN session cookie:

```
ciscoasa
(config)#
 webvpn
ciscoasa(config-webvpn)# http-only-cookie
ciscoasa(config-webvpn)
```

Related Commands

Command	Description
show running-config webvpn	Displays the running configuration for Clientless SSL VPN.

http-proxy (call-home)

To set the HTTP(S) proxy for smart licensing and Smart Call Home, use the **http-proxy** command in call-home configuration mode. To remove the proxy, use the **no** form of this command.

http-proxy*ip_address***port***port*
no http-proxy *ip_address* **port** *port*

Syntax Description

ip_address	Sets the IP address for the HTTP proxy server.
port *port*	Sets the port number for the HTTP proxy. For example, use 443 for an HTTPS server.

Command Default

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
Call-home configuration	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
9.3(2)	This command was added.

Usage Guidelines

This command sets an HTTP or HTTPS proxy globally for Smart Call Home and smart licensing.

Examples

The following example sets the HTTP proxy:

```
ciscoasa(config)# call-home
ciscoasa(cfg-call-home)# http-proxy 10.1.1.1 port 443
```

Related Commands

Command	Description
call-home	Configures Smart Call Home. Smart licensing uses Smart Call Home infrastructure.
clear configure license	Clears the smart licensing configuration.
feature tier	Sets the feature tier for smart licensing.
http-proxy	Sets the HTTP(S) proxy for smart licensing and Smart Call Home.

Command	Description
license smart	Lets you request license entitlements for smart licensing.
license smart deregister	Deregisters a device from the License Authority.
license smart register	Registers a device with the License Authority.
license smart renew	Renews the registration or the license entitlement.
service call-home	Enables Smart Call Home.
show license	Shows the smart licensing status.
show running-config license	Shows the smart licensing configuration.
throughput level	Sets the throughput level for smart licensing.

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** form 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.

Command Default

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	• Yes	• Yes	• Yes	—	—

Command History

Release	Modification
8.0(2)	This command was added.

Usage Guidelines

The ASA 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 ASA applies that value and enforces it. For example, when you disable HTTP proxy in dap-webvpn configuration mode, the ASA 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 ASA 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 DAP record named Finance.

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

Related Commands

Command	Description
dynamic-access-policy-record	Creates a DAP record.
show running-config dynamic-access-policy-record	Displays the running configuration for all DAP records, or for the named DAP record.

http-proxy (webvpn)

To configure the ASA 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

host	Hostname or IP address for the external HTTP proxy server.
pac pacfile	Identifies the PAC file that contains a JavaScript function that specifies one or more proxies.
password	(Optional, and available only if you specify a username) Enter this keyword to accompany each HTTP proxy request with a password to provide basic, proxy authentication.
password	Password to send to the proxy server with each HTTP request.
port	(Optional) Port number used by the HTTP proxy server. The default port is 80, which is the port that the ASA uses if you do not supply a value. The range is 1-65535.
url	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.
username	Username to send to the proxy server with each HTTP request.

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.0(1)	This command was added.
8.0(2)	The **exclude**, **username**, and **password** keywords were added.

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 ASA 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.

Note Proxy NTLM authentication is not supported in **http-proxy**. Only proxy without authentication and basic authentication are supported.

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:

```
ciscoasa
(config)#
 webvpn
ciscoasa(config-webvpn)# http-proxy 209.165.201.2
ciscoasa(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:

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

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

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

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

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

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

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

To specify that the ASA 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** form of this command. To remove all **http redirect** commands from the configuration, use the **no** form of this command without arguments.

http redirect *interface* [*port*]
no http redirect [*interface*]

Syntax Description

interface	Identifies the interface for which the ASA should redirect HTTP requests to HTTPS.
port	Identifies the port that the ASA listens on for HTTP requests, which it then redirects to HTTPS. By default, it listens on port 80,

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.0(1)	This command was added.

Usage Guidelines

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

If the **http redirect** command fails, the following message appears:

```
"TCP port <port_number> on interface <interface_name> is in use by another feature. Please
 choose a different port for the HTTP redirect service"
```

Use a different port for the HTTP redirect service.

Examples

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

```
ciscoasa(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 ASA 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 ASA.
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 basic-auth-client

To allow non-browser-based HTTPS clients to access HTTPS services on the ASA, use the **http server basic-auth-client** command in global configuration mode. To remove support for a client, use the **no** form of this command.

http server basic-auth-client *user_agent*
no http server basic-auth-client *user_agent*

Syntax Description

user_agent Specifies the client's User-Agent string in the HTTP header of the HTTP request. You can specify the complete string or a partial string; partial strings must match the start of the User-Agent string. We recommend complete strings for better security. Note that the string is case-sensitive.

For example, **curl** will match the following User-Agent string:

```
curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.19.1 Basic ECC
zlib/1.2.3 libidn/1.18 libssh2/1.4.2
```

curl will not match the following User-Agent string:

```
abcd curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.19.1 Basic ECC
zlib/1.2.3 libidn/1.18 libssh2/1.4.2
```

CURL will not match the following User-Agent string:

```
curl/7.19.7 (x86_64-redhat-linux-gnu) libcurl/7.19.7 NSS/3.19.1 Basic ECC
zlib/1.2.3 libidn/1.18 libssh2/1.4.2
```

Command Default

By default, ASDM, CSM, and REST API are allowed.

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
9.12(1)	Command added.

Usage Guidelines

Enter each client string using a separate command. Many specialty clients (for example, python libraries, curl, and wget) do not support Cross-site request forgery (CSRF) token-based authentication, so you need to

specifically allow these clients to use the ASA basic authentication method. For security purposes, you should only allow required clients.

Examples

The following example allows the curl client:

```
ciscoasa(config)# http server basic-auth-client curl
```

Related Commands

Command	Description
http server enable	Enables the HTTPS server on the ASA.

http server enable

To enable the ASA 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

port	The port to use for HTTP connections. The range is 1-65535. The default port is 443.

Command Default

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
7.0(1)	This command was added.

Examples

The following example shows how to enable the HTTP server.

```
ciscoasa(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 ASA 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 ASA.
http redirect	Specifies that the ASA 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.

http server idle-timeout

To set an idle timeout for ASDM connections to the ASA, use the **http server idle-timeout** command in global configuration mode. To disable the timeout, use the **no** form of this command.

http server idle-timeout [*minutes*]
no http server idle-timeout [*minutes*]

Syntax Description

minutes	The idle timeout, from 1-1440 minutes.

Command Default

The default setting is 20 minutes.

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	• Yes	—	• Yes	• Yes	—

Command History

Release	Modification
8.2(1)	This command was added.

Usage Guidelines

Although you can enter this command in multiple context mode, the command has no effect. You cannot configure HTTP server timeouts in multiple context mode.

Examples

The following example sets the idle timeout for ASDM sessions to 500 minutes:

```
ciscoasa(config)# http server idle-timeout 500
```

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 and the 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 ASA.
http server enable	Enables the HTTP server for ASDM sessions.

Command	Description
http server session-timeout	Limits the session time of ASDM sessions to the ASA.
http redirect	Specifies that the ASA 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.

http server session-timeout

To set a session timeout for ASDM connections to the ASA, use the **http server session-timeout** command in global configuration mode. To disable the timeout, use the **no** form of this command.

http server session-timeout [*minutes*]
no http server session-timeout [*minutes*]

Syntax Description

minutes	The session timeout, from 1-1440 minutes.

Command Default

The session timeout is disabled. ASDM connections have no session time limit.

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	• Yes	—	• Yes	• Yes	—

Command History

Release	Modification
8.2(1)	This command was added.

Usage Guidelines

Although you can enter this command in multiple context mode, the command has no effect. You cannot configure HTTP server timeouts in multiple context mode.

Examples

The following example sets a session timeout for ASDM connections to 1000 minutes:

```
ciscoasa(config)# http server session-timeout 1000
```

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 and the 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 ASA.
http server enable	Enables the HTTP server for ASDM sessions.

Command	Description
http server session-timeout	Limits the idle time of ASDM sessions to the ASA.
http redirect	Specifies that the ASA 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 ASA 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*] | [**username** *username* { **password** *password* }]
no https-proxy

Syntax Description

host	Hostname or IP address for the external HTTPS proxy server.
password	(Optional, and available only if you specify a username) Enter this keyword to accompany each HTTPS proxy request with a password to provide basic, proxy authentication.
password	Password to send to the proxy server with each HTTPS request.
port	(Optional) Port number used by the HTTPS proxy server. The default port is 443, which is the port the ASA uses if you do not supply a value. The range is 1-65535.
url	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 HTTPS proxy request with a username to provide basic, proxy authentication.
username	Username to send to the proxy server with each HTTPS request.

Command Default

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
7.0(1)	This command was added.
8.0(2)	The **exclude**, **username**, and **password** keywords were added.

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 ASA 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:

```
ciscoasa
(config)#
 webvpn
ciscoasa(config-webvpn)# https-proxy 209.165.201.2
ciscoasa(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:

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

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

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

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

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

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

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

http username-from-certificate

To specify the field in a certificate/rule from which you want to derive the username for ASDM authorization or authentication use, use the **http username-from-certificate** command.

http username-from-certificate { < **primary-attr** > [< **secondary-attr** >] | **use-entire-name** | **use-script** } | **pre-fill-username**

Syntax Description

pre-fill-username	Enables the use of the existing username-from-certificate command from the tunnel-group general-attributes mode that serves the same purpose for VPN connections. When enabled, this username, along with the password typed in by the user, is used for authentication.
primary-attr	Specify the attribute used to derive the username.
secondary-attr	Specify an additional attribute used with the primary attribute to derive the username.
use-entire-name	Use entire DN name. Not available as a secondary attribute.
use-script	Use LUA script generated by ASDM.

Command Default

The default for this command is http username-from-certificate CN OU.

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	• Yes	—	• Yes	—	—

Command History

Release	Modification
9.4(1)	This command was added.

Usage Guidelines

Possible values for primary and secondary attributes and the meanings of the related keywords are as follows:

Attribute/Keyword	Definition
C	Country: the two-letter country abbreviation. These codes conform to ISE 3166 country abbreviations.
CN	Common Name: the name of a person, system, or other entity. Not available as a secondary attribute.
DNQ	Domain Name Qualifier.

Attribute/Keyword	Definition
EA	Email address.
GENQ	Generation qualifier.
GN	Given name.
I	Initials.
L	Locality: the city or town where the organization is located.
N	Name.
O	Organization: the name of the company, institution, agency, association or other entity.
OU	Organizational Unit: the subgroup within the organization (0).
SER	Serial Number.
SN	Surname.
SP	State/Province: the state or province where the organization is located.
T	Title.
UID	User Identifier.
UPN	User Principal Name.

This command is not available on platforms that do not support webvpn(ASA 1000v) and platforms with No Payload Encryption (NPE) enabled.

Examples

```
100/act(config)# http ?
configure mode commands/options:
  Hostname or A.B.C.D         The IP address of the host and/or network
                              authorized to access the HTTP server
  X:X:X:X::X/<0-128>          IPv6 address/prefix authorized to access the HTTP
                              server
  authentication-certificate  Request a certificate from the HTTPS client when
                              a management connection is being established
  redirect                    Redirect HTTP connections to the security gateway
                              to use HTTPS
  server                      Enable the http server required to run Device
                              Manager
  username-from-certificate   Specify fields from certificate DN to be used for
                              authorization/authentication
100/act(config)# help http
USAGE:
        [no] http {<local_ip>|<hostname>} <mask> <if_name>
        [no] http authentication-certificate <if_name>
        [no] http redirect <if_name> [<port>]
        [no] http server enable [<port>]
        [no] http username-from-certificate {<primary-attr> [<secondary-attr>] | use-
entire-name | use-script } [pre-fill-username]
        show running-config [all] http
        clear configure http
DESCRIPTION:
```

```
http            Configure HTTP server
SYNTAX:
<local_ip>      The ip address of the host and/or network authorized to
                access the device HTTP server.
<hostname>      Hostname of the host authorized to access the device
                HTTP server.
<mask>          The IP netmask to apply to <local_ip>.
                Default is 255.255.255.255.
<if_name>       Network interface name.
<port>          The decimal number or name of a TCP or UDP port.
                Default is "http" (80).
<primary-attr>  The DN from the certificate to be used as the username

<secondary-attr> Optional Secondary DN from the certificate to be used in the username
```

hw-module module allow-ip

For the AIP SSC on the ASA 5505, to set the hosts that are allowed to access the management IP address, use the **hw-module module allow-ip** command in privileged EXEC mode.

hw-module module 1 allow-ip *ip_address netmask*

Syntax Description

1	Specifies the slot number, which is always 1.
ip_ address	Specifies the host IP address(es).
netmask	Specifies the subnet mask.

Command Default

In the factory default configuration, the following hosts are allowed to manage the IPS module: 192.168.1.5 through 192.168.1.254.

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	• Yes	• Yes	• Yes	—	—

Command History

Release	Modification
8.2(1)	This command was added.

Usage Guidelines

This command is only valid when the SSC status is Up.

These settings are written to the IPS application configuration, not the ASA configuration. You can view these settings from the ASA using the **show module details** command.

You can alternatively use the IPS application **setup** command to configure this setting from the IPS CLI.

Examples

The following example shows how to configure host parameters on the SSC:

```
ciscoasa# hw-module module 1 allow-ip 209.165.201.29 255.255.255.0
```

Related Commands

Command	Description
hw-module module ip	Configures the AIP SSC management address.
show module	Shows module status information.

hw-module module ip

For the AIP SSC on the ASA 5505, to configure the management IP address, use the **hw-module module ip** command in privileged EXEC mode.

hw-module module 1 ip *ip_address netmask gateway*

Syntax Description

1	Specifies the slot number, which is always 1.
gateway	Specifies the gateway IP address.
ip_address	Specifies the management IP address.
netmask	Specifies the subnet mask.

Command Default

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	• Yes	• Yes	• Yes	—	—

Command History

Release	Modification
8.2(1)	This command was added.

Usage Guidelines

Make sure this address is on the same subnet as the ASA VLAN IP address. For example, if you assigned 10.1.1.1 to the VLAN for the ASA, then assign another address on that network, such as 10.1.1.2, for the IPS management address.

If the management station is on a directly connected ASA network, then set the gateway to be the ASA IP address assigned to the IPS management VLAN. In the example decribed, set the gateway to 10.1.1.1. If the management station is on a remote network, then set the gateway to be the address of an upstream router on the IPS management VLAN.

Note These settings are written to the IPS application configuration, not the ASA configuration. You can view these settings from the ASA using the **show module details** command.You can alternatively use the IPS application **setup** command to configure this setting from the IPS CLI.

Examples

The following example shows how to configure a management address for the IPS module:

```
ciscoasa# hw-module module 1 ip 209.165.200.254
 255.255.255.224 209.165.200.225
```

Related Commands

Command	Description
hw-module module allow-ip	Configures the AIP SSC management host addresses.
show module	Shows module status information.

hw-module module password-reset

To reset the password for the default admin user on the hardware module to the default value, use the **hw-module module password-reset** command in privileged EXEC mode.

hw-module module 1 password-reset

Syntax Description

1	Specifies the slot number, which is always 1.

Command Default

The default username and password depends on your module:

- IPS module—username: **cisco**; password: **cisco**
- CSC module—username: **cisco**; password: **cisco**
- ASA CX module—username: **admin**; password: **Admin123**

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	• Yes	• Yes	• Yes	• Yes	—

Command History

Release	Modification
7.2(2)	This command was added.
8.4(4.1)	Support for the ASA CX module was added.

Usage Guidelines

This command is only valid when the hardware module is in the Up state and supports password reset. For IPS, password reset is supported if the module is running IPS Version 6.0 or later. After resetting the password, you should change it to a unique value using the module application. Resetting the module password causes the module to reboot. Services are not available while the module is rebooting, 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 1 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:

```
ciscoasa(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 a module by loading a recovery image from a TFTP server.
hw-module module reload	Reloads the module software.
hw-module module reset	Shuts down and resets the module hardware.
hw-module module shutdown	Shuts down the module software in preparation for being powered off without losing configuration data.
show module	Shows module information.

hw-module module recover

To load a recovery software image from a TFTP server to an installed module, 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 a module using this command if, for example, the module is unable to load a local image.

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

Syntax Description

1	Specifies the slot number, which is always 1.
boot	Initiates recovery of this module and downloads a recovery image according to the **configure** keyword settings. The module then reboots from the new image.
configure	Configures the network parameters to download a recovery image. If you do not enter a network parameter after the **configure** keyword, you are prompted for all parameters. This command prompts you for the URL for the TFTP server, the management interface IP address and netmask, gateway address, and VLAN ID. These network parameters are configured in ROMMON; the network parameters you configured in the module application configuration are not available to ROMMON, so you must set them separately here.
gateway *gateway_ip_address*	(Optional) The gateway IP address for access to the TFTP server through the SSM management interface.
ip *module_address*	(Optional) The IP address of the module management interface.
stop	Stops the recovery action, and stops downloading the recovery image. The module boots from the original image. You must enter this command within 30 to 45 seconds after starting recovery using the **hw-module module recover boot** command. If you issue the **stop** command after this period, it might cause unexpected results, such as the module becoming unresponsive.
url *tfp_url*	(Optional) The URL for the image on a TFTP server, in the following format: **tftp:**//*server*/[*path*/]*filename*
vlan *vlan_id*	(Optional) Specifies the VLAN ID for the management interface.

Command Default

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	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
7.0(1)	This command was added.

Usage Guidelines

If the module suffers a failure, and the module application image cannot run, you can reinstall a new image on the module from a TFTP server.

Note Do not use the **upgrade** command within the module software to install the image.

Be sure the TFTP server that you specify can transfer files up to 60 MB in size. This process can take approximately 15 minutes to complete, depending on your network and the size of the image.

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

You can view the recovery configuration using the **show module 1 recover** command.

Note This command is not supported on these modules: ASA CX, ASA FirePOWER.

Examples

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

```
ciscoasa# 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 module:

```
ciscoasa# 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 debug messages about the module booting process.
hw-module module reset	Shuts down a module and performs a hardware reset.
hw-module module reload	Reloads the module software.
hw-module module shutdown	Shuts down the module software in preparation for being powered off without losing configuration data.
show module	Shows module information.

hw-module module recover (ASA 5506W-X)

To load recover the default configuration or access ROMMON to load a new image on the wireless access point on a ASA 5506W-X, use the **hw-module module recover** command in privileged EXEC mode.

hw-module module wlan recover [**configuration** | **image**]

Syntax Description

configuration	Resets the wireless access point to the factory default configuration.
image	Sessions into the module console so you can access ROMMON and perform a TFTP upgrade procedure.

Command Default

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	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
9.4(1)	This command was added.

Usage Guidelines

The **image** keyword sessions to the access point CLI over the backplane and reloads the access point. When the access point boots, you can escape the boot process to access ROMMON and perform a TFTP image download. See Reloading the Access Point Image > Using the CLI for detailed steps.

Examples

The following example recovers an image on the access point:

```
ciscoasa# hw-module module wlan recover image
WARNING: Image recovery cannot be carried out via CLI command on this module.
Do you want to reset the module and session into the module console to carry out the image
 recovery?[confirm]
Resetting the module and sessioning into the module console
```

Related Commands

Command	Description
hw-module module wlan reset	Shuts down a module and performs a hardware reset.

hw-module module reload

To reload module software for a physical module, use the **hw-module module reload** command in privileged EXEC mode.

hw-module module 1 reload

Syntax Description

1	Specifies the slot number, which is always 1.

Command Default

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	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
7.0(1)	This command was added.
8.4(4.1)	Support for the ASA CX module was added.
9.2(1)	Support for the ASA FirePOWER module was added.

Usage Guidelines

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

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

Examples

The following example reloads the module in slot 1:

```
ciscoasa# 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 module booting process.
hw-module module recover	Recovers a module by loading a recovery image from a TFTP server.

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

hw-module module reset

To reset the module hardware and then reload the module software, use the **hw-module module reset** command in privileged EXEC mode.

hw-module module { **1** | **wlan** } **reset**

Syntax Description

1	Specifies the slot number, which is always 1.
wlan	For the ASA 5506W-X, specifies the wireless access point.

Command Default

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	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
7.0(1)	This command was added.
8.4(4.1)	Support for the ASA CX module was added.
9.2(1)	Support for the ASA FirePOWER module was added.
9.4(1)	The **wlan** keyword was added.

Usage Guidelines

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

You can recover a module (if supported) using the **hw-module module recover** command. If you enter the **hw-module module reset** command while the module is in a Recover state, the module does not interrupt the recovery process. The **hw-module module reset** command performs a hardware reset of the module, and the module recovery continues after the hardware reset. You might want to reset the module during recovery if the module 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.

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

Examples

The following example resets an module in slot 1 that is in the Up state:

```
ciscoasa# 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 module booting process.
hw-module module recover	Recovers a module by loading a recovery image from a TFTP server.
hw-module module reload	Reloads the module software.
hw-module module shutdown	Shuts down the module software in preparation for being powered off without losing configuration data.
show module	Shows module information.

hw-module module shutdown

To shut down the module 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.

Command Default

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	• Yes	• Yes	• Yes	—	• Yes

Command History

Release	Modification
7.0(1)	This command was added.
8.4(4.1)	Support for the ASA CX module was added.
9.2(1)	Support for the ASA FirePOWER module was added.

Usage Guidelines

Shutting down the module software prepares the module to be safely powered off without losing configuration data.

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

Examples

The following example shuts down a module in slot 1:

```
ciscoasa# hw-module module 1 shutdown
Shutdown module in slot 1? [confirm] y
Shutdown issued for module in slot 1
ciscoasa#
%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 debugging messages about the module booting process.

Command	Description
hw-module module recover	Recovers a module by loading a recovery image from a TFTP server.
hw-module module reload	Reloads the module software.
hw-module module reset	Shuts down a module and performs a hardware reset.
show module	Shows module information.