



## **show scansafe through show switch vlan Commands**

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# show scansafe server

To show the status of the Cloud Web Security proxy servers, use the **show scansafe server** command in privileged EXEC mode.

**show scansafe server**

**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	•	•	•	—	•

Release	Modification
9.0(1)	We introduced this command.

**Usage Guidelines** This command shows the status of the server, whether it is the current active server, the backup server, or unreachable.

**Examples** The following is sample output from the **show scansafe server** command:

```
hostname# show scansafe server
hostname# Primary: proxy197.scansafe.net (72.37.244.115) (REACHABLE)*
hostname# Backup: proxy137.scansafe.net (80.254.152.99)
```

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

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

# show scansafe statistics

To show information about Cloud Web Security activity, use the **show scansafe statistics** command in privileged EXEC mode.

**show scansafe statistics**

**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	•	•	•	—	•

Release	Modification
9.0(1)	We introduced this command.

**Usage Guidelines** The **show scansafe statistics** command shows information about Cloud Web Security activity, such as the number of connections redirected to the proxy server, the number of current connections being redirected, and the number of whitelisted connections.

**Examples** The following is sample output from the **show scansafe statistics** command:

```
hostname# show scansafe statistics
Current HTTP sessions : 0
Current HTTPS sessions : 0
Total HTTP Sessions : 0
Total HTTPS Sessions : 0
Total Fail HTTP sessions : 0
Total Fail HTTPS sessions : 0
Total Bytes In : 0 Bytes
Total Bytes Out : 0 Bytes
HTTP session Connect Latency in ms(min/max/avg) : 0/0/0
HTTPS session Connect Latency in ms(min/max/avg) : 0/0/0
```

## Related Commands

Command	Description
<b>class-map type inspect scansafe</b>	Creates an inspection class map for whitelisted users and groups.
<b>default user group</b>	Specifies the default username and/or group if the ASA cannot determine the identity of the user coming into the ASA.
<b>http[s] (parameters)</b>	Specifies the service type for the inspection policy map, either HTTP or HTTPS.
<b>inspect scansafe</b>	Enables Cloud Web Security inspection on the traffic in a class.
<b>license</b>	Configures the authentication key that the ASA sends to the Cloud Web Security proxy servers to indicate from which organization the request comes.
<b>match user group</b>	Matches a user or group for a whitelist.
<b>policy-map type inspect scansafe</b>	Creates an inspection policy map so you can configure essential parameters for the rule and also optionally identify the whitelist.
<b>retry-count</b>	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.
<b>scansafe</b>	In multiple context mode, allows Cloud Web Security per context.
<b>scansafe general-options</b>	Configures general Cloud Web Security server options.
<b>server {primary   backup}</b>	Configures the fully qualified domain name or IP address of the primary or backup Cloud Web Security proxy servers.
<b>show conn scansafe</b>	Shows all Cloud Web Security connections, as noted by the capitol Z flag.
<b>show scansafe server</b>	Shows the status of the server, whether it's the current active server, the backup server, or unreachable.
<b>user-identity monitor</b>	Downloads the specified user or group information from the AD agent.
<b>whitelist</b>	Performs the whitelist action on the class of traffic.

# show service-policy

To display the service policy statistics, use the **show service-policy** command in privileged EXEC mode.

```
show service-policy [global | interface intf] [csc | cxsc | inspect inspection [arguments] | ips |  
police | priority | set connection [details] | shape | user-statistics]
```

```
show service-policy [global | interface intf] [flow protocol {host src_host | src_ip src_mask}  
[eq src_port] {host dest_host | dest_ip dest_mask} [eq dest_port] [icmp_number |  
icmp_control_message]]
```

## Syntax Description

<b>csc</b>	(Optional) Shows detailed information about policies that include the <b>csc</b> command.
<b>cxsc</b>	(Optional) Shows detailed information about policies that include the <b>cxsc</b> command.
<i>dest_ip dest_mask</i>	For the <b>flow</b> keyword, the destination IP address and netmask of the traffic flow.
<b>details</b>	(Optional) For the <b>set connection</b> keyword, displays per-client connection information, if a per-client connection limit is enabled.
<b>eq dest_port</b>	(Optional) For the <b>flow</b> keyword, equals the destination port for the flow.
<b>eq src_port</b>	(Optional) For the <b>flow</b> keyword, equals the source port for the flow.
<b>flow protocol</b>	<p>(Optional) Shows policies that match a particular flow identified by the 5-tuple (protocol, source IP address, source port, destination IP address, destination port). You can use this command to check that your service policy configuration will provide the services you want for specific connections.</p> <p>Because the flow is described as a 5-tuple, not all policies are supported. See the following supported policy matches:</p> <ul style="list-style-type: none"> <li>• <b>match access-list</b></li> <li>• <b>match port</b></li> <li>• <b>match rtp</b></li> <li>• <b>match default-inspection-traffic</b></li> </ul>
<b>global</b>	(Optional) Limits output to the global policy.
<b>host dest_host</b>	For the <b>flow</b> keyword, the host destination IP address of the traffic flow.
<b>host src_host</b>	For the <b>flow</b> keyword, the host source IP address of the traffic flow.
<i>icmp_control_message</i>	(Optional) For the <b>flow</b> keyword when you specify ICMP as the protocol, specifies an ICMP control message of the traffic flow.
<i>icmp_number</i>	(Optional) For the <b>flow</b> keyword when you specify ICMP as the protocol, specifies the ICMP protocol number of the traffic flow.
<b>inspect inspection</b> <i>[arguments]</i>	(Optional) Shows detailed information about policies that include an <b>inspect</b> command. Not all <b>inspect</b> commands are supported for detailed output. To see all inspections, use the <b>show service-policy</b> command without any arguments. The arguments available for each inspection vary; see the CLI help for more information.

<b>interface</b> <i>intf</i>	(Optional) Displays policies applied to the interface specified by the <i>intf</i> argument, where <i>intf</i> is the interface name given by the <b>nameif</b> command.
<b>ips</b>	(Optional) Shows detailed information about policies that include the <b>ips</b> command.
<b>police</b>	(Optional) Shows detailed information about policies that include the <b>police</b> command.
<b>priority</b>	(Optional) Shows detailed information about policies that include the <b>priority</b> command.
<b>set connection</b>	(Optional) Shows detailed information about policies that include the <b>set connection</b> command.
<b>shape</b>	(Optional) Shows detailed information about policies that include the <b>shape</b> command.
<i>src_ip src_mask</i>	For the <b>flow</b> keyword, the source IP address and netmask used in the traffic flow.
<b>user-statistics</b>	(Optional) Shows detailed information about policies that include the <b>user-statistics</b> command. This command displays user statistics for the Identify Firewall, including sent packet count, sent drop count, received packet count, and send drop count for selected users.

### Defaults

If you do not specify any arguments, this command shows all global and interface policies.

### Command Modes

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

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

### Command History

Release	Modification
7.0(1)	This command was introduced.
7.1(1)	The <b>csc</b> keyword was added.
7.2(4)/8.0(4)	The <b>shape</b> keyword was added.
8.4(2)	We added support for the <b>user-statistics</b> keyword for the Identity Firewall.
8.4(4.1)	We added support for the <b>cxsc</b> keyword for the ASA CX module.

### Usage Guidelines

The number of embryonic connections displayed in the **show service-policy** command output indicates the current number of embryonic connections to an interface for traffic matching that defined by the **class-map** command. The “embryonic-conn-max” field shows the maximum embryonic limit configured for the traffic class using the Modular Policy Framework. If the current embryonic connections displayed equals or exceeds the maximum, TCP intercept is applied to new TCP connections that match the traffic type defined by the **class-map** command.

When you make service policy changes to the configuration, all *new* connections use the new service policy. Existing connections continue to use the policy that was configured at the time of the connection establishment. **show** command output will not include data about the old connections. For example, if you remove a QoS service policy from an interface, then re-add a modified version, then the **show service-policy** command only displays QoS counters associated with new connections that match the new service policy; existing connections on the old policy no longer show in the command output. To ensure that all connections use the new policy, you need to disconnect the current connections so they can reconnect using the new policy. See the **clear conn** or **clear local-host** commands.

**Note**

For an **inspect icmp** and **inspect icmp error** policies, the packet counts only include the echo request and reply packets.

**Examples**

The following is sample output from the **show service-policy global** command:

```
hostname# show service-policy global

Global policy:
  Service-policy: inbound_policy
  Class-map: ftp-port
    Inspect: ftp strict inbound_ftp, packet 0, drop 0, reset-drop 0
```

The following is sample output from the **show service-policy priority** command:

```
hostname# show service-policy priority

Interface outside:

Global policy:
  Service-policy: sa_global_fw_policy

Interface outside:
  Service-policy: ramap
  Class-map: clientmap
  Priority:
    Interface outside: aggregate drop 0, aggregate transmit 5207048
  Class-map: udpmap
  Priority:
    Interface outside: aggregate drop 0, aggregate transmit 5207048
  Class-map: cmap
```

The following is sample output from the **show service-policy flow** command:

```
hostname# show service-policy flow udp host 209.165.200.229 host 209.165.202.158 eq 5060

Global policy:
  Service-policy: fl_global_fw_policy
  Class-map: inspection_default
  Match: default-inspection-traffic
  Action:
    Input flow: inspect sip

Interface outside:
  Service-policy: test
  Class-map: test
  Match: access-list test
    Access rule: permit ip 209.165.200.229 255.255.255.224 209.165.202.158
    255.255.255.224
  Action:
    Input flow: ids inline
```



```
Input flow: set connection conn-max 10 embryonic-conn-max 20
```

The following is sample output from the **show service-policy inspect http** command. This example shows the statistics of each match command in a match-any class map.

```
hostname# show service-policy inspect http
```

```
Global policy:
Service-policy: global_policy
Class-map: inspection_default
Inspect: http http, packet 1916, drop 0, reset-drop 0
protocol violations
packet 0
class http_any (match-any)
Match: request method get, 638 packets
Match: request method put, 10 packets
Match: request method post, 0 packets
Match: request method connect, 0 packets
log, packet 648
```

The following is sample output from the **show service-policy inspect waas** command. This example shows the waas statistics.

```
hostname# show service-policy inspect waas
```

```
Global policy:
Service-policy: global_policy
Class-map: WAAS
Inspect: waas, packet 12, drop 0, reset-drop 0
SYN with WAAS option 4
SYN-ACK with WAAS option 4
Confirmed WAAS connections 4
Invalid ACKs seen on WAAS connections 0
Data exceeding window size on WAAS connections 0
```

The following is sample output from the **show gtp requests** command:

```
hostname# show gtp requests
0 in use, 0 most used, 200 maximum allowed
```

You can use the vertical bar **|** to filter the display, as in the following example:

```
hostname# show service-policy gtp statistics | grep gsn
```

This example shows the GTP statistics with the word **gsn** in the output.

The following command shows the statistics for GTP inspection:

```
hostname# show service-policy inspect gtp statistics
GPRS GTP Statistics:
version_not_support | 0 | msg_too_short | 0
unknown_msg | 0 | unexpected_sig_msg | 0
unexpected_data_msg | 0 | ie_duplicated | 0
mandatory_ie_missing | 0 | mandatory_ie_incorrect | 0
optional_ie_incorrect | 0 | ie_unknown | 0
ie_out_of_order | 0 | ie_unexpected | 0
total_forwarded | 0 | total_dropped | 0
signalling_msg_dropped | 0 | data_msg_dropped | 0
signalling_msg_forwarded | 0 | data_msg_forwarded | 0
total_created_pdp | 0 | total_deleted_pdp | 0
total_created_pdpmb | 0 | total_deleted_pdpmb | 0
pdp_non_existent | 0
```

Table 58-1 describes each column of the output from the **show service-policy inspect gtp statistics** command.

**Table 58-1 GPRS GTP Statistics**

Column Heading	Description
version_not_support	Displays packets with an unsupported GTP version field.
msg_too_short	Displays packets less than 8 bytes in length.
unknown_msg	Displays unknown type messages.
unexpected_data_msg	Displays unexpected data messages.
mandatory_ie_missing	Displays messages missing a mandatory Information Element (IE).
mandatory_ie_incorrect	Displays messages with an incorrectly formatted mandatory Information Element (IE).
optional_ie_incorrect	Displays messages with an incorrectly formatted optional Information Element (IE).
ie_unknown	Displays messages with an unknown Information Element (IE).
ie_out_of_order	Displays messages with out-of-sequence Information Elements (IEs).
ie_unexpected	Displays messages with an unexpected Information Element (IE).
total_forwarded	Displays the total messages forwarded.
total_dropped	Displays the total messages dropped.
signalling_msg_dropped	Displays the signaling messages dropped.
data_msg_dropped	Displays the data messages dropped.
signalling_msg_forwarded	Displays the signaling messages forwarded.
data_msg_forwarded	Displays the data messages forwarded.
total_created_pdp	Displays the total Packet Data Protocol (PDP) contexts created.
total_deleted_pdp	Displays the total Packet Data Protocol (PDP) contexts deleted.
total_created_pdpmcb	Displays the total PDPMCB sessions created.
total_deleted_pdpmcb	Displays the total PDPMCB sessions deleted.
pdp_non_existent	Displays the messages received for a non-existent PDP context.

The following command displays information about the PDP contexts:

```
hostname# show service-policy inspect gtp pdp-context
1 in use, 1 most used, timeout 0:00:00

Version TID | MS Addr | SGSN Addr | Idle | APN
v1 | 1234567890123425 | 1.1.1.1 | 11.0.0.2 0:00:13  gprs.cisco.com
```

```

|user_name (IMSI): 214365870921435 |MS address: |1.1.1.1
|primary pdp: Y |nsapi: 2
|sgsn_addr_signal: |11.0.0.2 |sgsn_addr_data: |11.0.0.2
|ggsn_addr_signal: |9.9.9.9 |ggsn_addr_data: |9.9.9.9
|sgsn control teid: |0x000001d1 |sgsn data teid: |0x000001d3
|ggsn control teid: |0x6306ffa0 |ggsn data teid: |0x6305f9fc
|seq_tpdu_up: |0 |seq_tpdu_down: |0
|signal_sequence: |0
|upstream_signal_flow: |0 |upstream_data_flow: |0
|downstream_signal_flow: |0 |downstream_data_flow: |0
|RAupdate_flow: |0

```

Table 58-2 describes each column of the output from the **show service-policy inspect gtp pdp-context** command.

**Table 58-2 PDP Contexts**

Column Heading	Description
Version	Displays the version of GTP.
TID	Displays the tunnel identifier.
MS Addr	Displays the mobile station address.
SGSN Addr	Displays the serving gateway service node.
Idle	Displays the time for which the PDP context has not been in use.
APN	Displays the access point name.

#### Related Commands

Command	Description
<b>clear configure service-policy</b>	Clears service policy configurations.
<b>clear service-policy</b>	Clears all service policy configurations.
<b>service-policy</b>	Configures the service policy.
<b>show running-config service-policy</b>	Displays the service policies configured in the running configuration.

# show shared license

To show shared license statistics, use the **show shared license** command in privileged EXEC mode. Optional keywords are available only for the licensing server.

**show shared license** [**detail** | **client** *[hostname]* | **backup**]

Syntax Description	<b>backup</b>	(Optional) Shows information about the backup server.
	<b>client</b>	(Optional) Limits the display to participants.
	<b>detail</b>	(Optional) Shows all statistics, including per participant.
	<i>hostname</i>	(Optional) Limits the display to a particular participant.

**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	•	—	•		—

Command History	Release	Modification
	8.2(1)	This command was introduced.

**Usage Guidelines** To clear the statistics, enter the **clear shared license** command.

**Examples** The following is sample output from the **show shared license** command on the license participant:

```
hostname# show shared license
Primary License Server : 10.3.32.20
  Version              : 1
  Status               : Inactive

Shared license utilization:
SSLVPN:
  Total for network    :    5000
  Available            :    5000
  Utilized             :         0
This device:
  Platform limit      :     250
  Current usage       :         0
  High usage          :         0
Messages Tx/Rx/Error:
  Registration        : 0 / 0 / 0
```

```

Get           : 0 / 0 / 0
Release       : 0 / 0 / 0
Transfer      : 0 / 0 / 0

Client ID      Usage  Hostname
ASA0926K04D    0      5510-B

```

Table 58-3 describes the output from the **show shared license** command.

**Table 58-3** *show shared license Description*

Field	Description
Primary License Server	The IP address of the primary server.
Version	The shared license version.
Status	<p>If the command is issued on the backup server, “Active” means that this device has taken on the role as a Primary Shared Licensing server. “Inactive” means that the device is ready in standby mode, and the device is communicating with the primary server.</p> <p>If failover is configured on the primary licensing server, the backup server may become “Active” for a brief moment during a failover but should return to “Inactive” after communications have synced up again.</p>
Shared license utilization	
SSLVPN	
Total for network	Displays the total number of shared sessions available.
Available	Displays the remaining shared sessions available.
Utilized	Displays the shared sessions obtained for the active license server.
This device	
Platform limit	Displays the total number of SSL VPN sessions for this device according to the installed license.
Current usage	Displays the number of shared SSL VPN session currently owned by this device from the shared pool.
High usage	Displays the highest number of shared SSL VPN sessions ever owned by this device.
Messages Tx/Rx/Error	
Registration Get Release Transfer	Shows the Transmit, Received, and Error packets of each type of connection.
Client ID	A unique client ID.
Usage	Displays the number of sessions in use.
Hostname	Displays the hostname for this device.

The following is sample output from the **show shared license detail** command on the license server:

```

hostname# show shared license detail
Backup License Server Info:

```

## ■ show shared license

```

Device ID           : ABCD
Address             : 10.1.1.2
Registered          : NO
HA peer ID          : EFGH
Registered          : NO
  Messages Tx/Rx/Error:
    Hello            : 0 / 0 / 0
    Sync             : 0 / 0 / 0
    Update           : 0 / 0 / 0

Shared license utilization:
  SSLVPN:
    Total for network :      500
    Available          :      500
    Utilized           :         0
  This device:
    Platform limit    :      250
    Current usage      :         0
    High usage         :         0
  Messages Tx/Rx/Error:
    Registration       : 0 / 0 / 0
    Get                : 0 / 0 / 0
    Release            : 0 / 0 / 0
    Transfer           : 0 / 0 / 0

Client Info:

  Hostname           : 5540-A
  Device ID          : XXXXXXXXXXXX
  SSLVPN:
    Current usage     : 0
    High              : 0
  Messages Tx/Rx/Error:
    Registration       : 1 / 1 / 0
    Get                : 0 / 0 / 0
    Release            : 0 / 0 / 0
    Transfer           : 0 / 0 / 0
...

```

**Related Commands**

Command	Description
<b>activation-key</b>	Enters a license activation key.
<b>clear configure license-server</b>	Clears the shared licensing server configuration.
<b>clear shared license</b>	Clears shared license statistics.
<b>license-server address</b>	Identifies the shared licensing server IP address and shared secret for a participant.
<b>license-server backup address</b>	Identifies the shared licensing backup server for a participant.
<b>license-server backup backup-id</b>	Identifies the backup server IP address and serial number for the main shared licensing server.
<b>license-server backup enable</b>	Enables a unit to be the shared licensing backup server.
<b>license-server enable</b>	Enables a unit to be the shared licensing server.
<b>license-server port</b>	Sets the port on which the server listens for SSL connections from participants.
<b>license-server refresh-interval</b>	Sets the refresh interval provided to participants to set how often they should communicate with the server.

Command	Description
<b>license-server secret</b>	Sets the shared secret on the shared licensing server.
<b>show activation-key</b>	Shows the current licenses installed.
<b>show running-config license-server</b>	Shows the shared licensing server configuration.
<b>show vpn-sessiondb</b>	Shows license information about VPN sessions.

# show shun

To display shun information, use the **show shun** command in privileged EXEC mode.

```
show shun [src_ip | statistics]
```

Syntax Description	<i>src_ip</i>	(Optional) Displays the information for that address.
	<i>statistics</i>	(Optional) Displays the interface counters only.

Defaults	No default behavior or values.
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**Command Modes** The following table shows the modes in which you can enter the command:

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

Command History	Release	Modification
	7.0(1)	This command was introduced.
	8.2(2)	For threat events, the severity level was changed from a warning to a notification. Threat events can be triggered every five minutes.

**Examples** The following is sample output from the **show shun** command:

```
hostname# show shun
shun (outside) 10.1.1.27 10.2.2.89 555 666 6
shun (inside1) 10.1.1.27 10.2.2.89 555 666 6
```

Related Commands	Command	Description
	<b>clear shun</b>	Disables all the shuns that are currently enabled and clears the shun statistics.
	<b>shun</b>	Enables a dynamic response to an attacking host by preventing new connections and disallowing packets from any existing connection.



# show sip

To display SIP sessions, use the **show sip** command in privileged EXEC mode.

## show sip

### Syntax Description

This command has no arguments or keywords.

### Defaults

No default behavior or values.

### Command Modes

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

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

### Command History

Release	Modification
7.0(1)	This command was introduced.

### Usage Guidelines

The **show sip** command assists in troubleshooting SIP inspection engine issues and is described with the **inspect protocol sip udp 5060** command. The **show timeout sip** command displays the timeout value of the designated protocol.

The **show sip** command displays information for SIP sessions established across the ASA. Along with the **debug sip** and **show local-host** commands, this command is used for troubleshooting SIP inspection engine issues.



#### Note

We recommend that you configure the **pager** command before using the **show sip** command. If there are a lot of SIP session records and the **pager** command is not configured, it will take a while for the **show sip** command output to reach its end.

### Examples

The following is sample output from the **show sip** command:

```
hostname# show sip
Total: 2
call-id c3943000-960ca-2e43-228f@10.130.56.44
| state Call init, idle 0:00:01
call-id c3943000-860ca-7e1f-11f7@10.130.56.45
| state Active, idle 0:00:06
```

This sample shows two active SIP sessions on the ASA (as shown in the `Total` field). Each `call-id` represents a call.

The first session, with the `call-id c3943000-960ca-2e43-228f@10.130.56.44`, is in the state `Call Init`, which means the session is still in call setup. Call setup is complete only when the ACK is seen. This session has been idle for 1 second.

The second session is in the state `Active`, in which call setup is complete and the endpoints are exchanging media. This session has been idle for 6 seconds.

**Related Commands**

Commands	Description
<b>class-map</b>	Defines the traffic class to which to apply security actions.
<b>debug sip</b>	Enables debug information for SIP.
<b>inspect sip</b>	Enables SIP application inspection.
<b>show conn</b>	Displays the connection state for different connection types.
<b>timeout</b>	Sets the maximum idle time duration for different protocols and session types.

# show skinny

To troubleshoot SCCP (Skinny) inspection engine issues, use the **show skinny** command in privileged EXEC mode.

## show skinny

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values.

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

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

Release	Modification
7.0(1)	This command was introduced.

**Command History**

**Usage Guidelines** The **show skinny** command assists in troubleshooting SCCP (Skinny) inspection engine issues.

**Examples** The following is sample output from the **show skinny** command under the following conditions. There are two active Skinny sessions set up across the ASA. The first one is established between an internal Cisco IP Phone at local address 10.0.0.11 and an external Cisco CallManager at 172.18.1.33. TCP port 2000 is the CallManager. The second one is established between another internal Cisco IP Phone at local address 10.0.0.22 and the same Cisco CallManager.

```
hostname# show skinny
```

	LOCAL	FOREIGN	STATE
1	10.0.0.11/52238	172.18.1.33/2000	1
	MEDIA 10.0.0.11/22948	172.18.1.22/20798	
2	10.0.0.22/52232	172.18.1.33/2000	1
	MEDIA 10.0.0.22/20798	172.18.1.11/22948	

The output indicates a call has been established between both internal Cisco IP Phones. The RTP listening ports of the first and second phones are UDP 22948 and 20798 respectively.

The following is the xlate information for these Skinny connections:

```
hostname# show xlate debug
2 in use, 2 most used
Flags: D|DNS, d|dump, I|identity, i|inside, n|no random,
       |o|outside, r|portmap, s|static
NAT from inside:10.0.0.11 to outside:172.18.1.11 flags si idle 0:00:16 timeout 0:05:00
NAT from inside:10.0.0.22 to outside:172.18.1.22 flags si idle 0:00:14 timeout 0:05:00
```

Related Commands	Commands	Description
	class-map	Defines the traffic class to which to apply security actions.
	debug skinny	Enables SCCP debug information.
	inspect skinny	Enables SCCP application inspection.
	show conn	Displays the connection state for different connection types.
	timeout	Sets the maximum idle time duration for different protocols and session types.

# show sla monitor configuration

To display the configuration values, including the defaults, for SLA operations, use the **show sla monitor configuration** command in user EXEC mode.

**show sla monitor configuration** [*sla-id*]

## Syntax Description

*sla-id* (Optional) The ID number of the SLA operation. Valid values are from 1 to 2147483647.

## Defaults

If the *sla-id* is not specified, the configuration values for all SLA operations are shown.

## Command Modes

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

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

## Command History

Release	Modification
7.2(1)	This command was introduced.

## Usage Guidelines

Use the **show running config sla monitor** command to see the SLA operation commands in the running configuration.

## Examples

The following is sample output from the **show sla monitor** command. It displays the configuration values for SLA operation 123. Following the output of the **show sla monitor** command is the output of the **show running-config sla monitor** command for the same SLA operation.

```
hostname> show sla monitor 124

SA Agent, Infrastructure Engine-II
Entry number: 124
Owner:
Tag:
Type of operation to perform: echo
Target address: 10.1.1.1
Interface: outside
Number of packets: 1
Request size (ARR data portion): 28
Operation timeout (milliseconds): 1000
Type Of Service parameters: 0x0
Verify data: No
Operation frequency (seconds): 3
Next Scheduled Start Time: Start Time already passed
```

```
Group Scheduled : FALSE
Life (seconds): Forever
Entry Ageout (seconds): never
Recurring (Starting Everyday): FALSE
Status of entry (SNMP RowStatus): Active
Enhanced History:

hostname# show running-config sla monitor 124

sla monitor 124
  type echo protocol ipIcmpEcho 10.1.1.1 interface outside
  timeout 1000
  frequency 3
sla monitor schedule 124 life forever start-time now
```

Related Commands	Command	Description
	show running-config sla monitor	Displays the SLA operation configuration commands in the running configuration.
	sla monitor	Defines an SLA monitoring operation.

# show sla monitor operational-state

To display the operational state of SLA operations, use the **show sla monitor operational-state** command in user EXEC mode.

**show sla monitor operational-state** [*sla-id*]

<b>Syntax Description</b>	<i>sla-id</i>	(Optional) The ID number of the SLA operation. Valid values are from 1 to 2147483647.
---------------------------	---------------	---

<b>Defaults</b>	If the <i>sla-id</i> is not specified, statistics for all SLA operations are displayed.
-----------------	---

<b>Command Modes</b>	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	•	•	•	•	—

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	7.2(1)	This command was introduced.

<b>Usage Guidelines</b>	Use the <b>show running-config sla monitor</b> command to display the SLA operation commands in the running configuration.
-------------------------	--

<b>Examples</b>	The following is sample output from the <b>show sla monitor operational-state</b> command:
-----------------	--

```
hostname> show sla monitor operational-state

Entry number: 124
Modification time: 14:42:23.607 EST Wed Mar 22 2006
Number of Octets Used by this Entry: 1480
Number of operations attempted: 4043
Number of operations skipped: 0
Current seconds left in Life: Forever
Operational state of entry: Active
Last time this entry was reset: Never
Connection loss occurred: FALSE
Timeout occurred: TRUE
Over thresholds occurred: FALSE
Latest RTT (milliseconds): NoConnection/Busy/Timeout
Latest operation start time: 18:04:26.609 EST Wed Mar 22 2006
Latest operation return code: Timeout
RTT Values:
RTTAvg: 0          RTTMin: 0          RTTMax: 0
```

show sla monitor operational-state

NumOfRTT: 0      RTTSum: 0      RTTSum2: 0

Related Commands

Command	Description
show running-config sla monitor	Displays the SLA operation configuration commands in the running configuration.
sla monitor	Defines an SLA monitoring operation.



# show snmp-server engineid

To display the identification of the SNMP engine that has been configured on the ASA, use the **show snmp-server engineid** command in privileged EXEC mode.

**show snmp-server engineid**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values.

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

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

Release	Modification
8.2(1)	This command was introduced.

**Examples** The following is sample output from the **show snmp-server engineid** command:

```
hostname# show snmp-server engineid
Local SNMP engineID: 80000009fe85f8fd882920834a3af7e4ca79a0a1220fe10685
```

**Usage Guidelines** An SNMP engine is a copy of SNMP that can reside on a local device. The engine ID is a unique value that is assigned for each SNMP agent for each ASA context. The engine ID is not configurable on the ASA. The engine ID is 25 bytes long, and is used to generate encrypted passwords. The encrypted passwords are then stored in flash memory. The engine ID can be cached. In a failover pair, the engine ID is synchronized with the peer.

**Related Commands**

Command	Description
<b>clear configure snmp-server</b>	Clears the SNMP server configuration.
<b>show running-config snmp-server</b>	Displays the SNMP server configuration.
<b>snmp-server</b>	Configures the SNMP server.

# show snmp-server group

To display the names of configured SNMP groups, the security model being used, the status of different views, and the storage type of each group, use the **show snmp-server group** command in privileged EXEC mode.

## show snmp-server group

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values.

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

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

Release	Modification
8.2(1)	This command was introduced.

**Command History**

**Examples** The following is sample output from the **show snmp-server group** command:

```
hostname# show snmp-server group
groupname: public                security model:v1
readview : <no readview specified> writeview: <no writeview specified>
notifyview: <no readview specified>
row status: active

groupname: public                security model:v2c
readview : <no readview specified> writeview: <no writeview specified>
notifyview: *<no readview specified>
row status: active

groupname: privgroup             security model:v3 priv
readview : def_read_view         writeview: <no writeview specified>
notifyview: def_notify_view
row status: active
```

**Usage Guidelines** SNMP users and groups are used according to the View-based Access Control Model (VACM) for SNMP. The SNMP group determines the security model to be used. The SNMP user should match the security model of the SNMP group. Each SNMP group name and security level pair must be unique.

Related Commands	Command	Description
	<b>clear configure snmp-server</b>	Clears the SNMP server configuration.
	<b>show running-config snmp-server</b>	Displays the SNMP server configuration.
	<b>snmp-server</b>	Configures the SNMP server.

# show snmp-server statistics

To display SNMP server statistics, use the **show snmp-server statistics** command in privileged EXEC mode.

**show snmp-server statistics**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values.

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

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

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

**Examples** The following is sample output from the **show snmp-server statistics** command:

```
hostname# show snmp-server statistics
0 SNMP packets input
  0 Bad SNMP version errors
  0 Unknown community name
  0 Illegal operation for community name supplied
  0 Encoding errors
  0 Number of requested variables
  0 Number of altered variables
  0 Get-request PDUs
  0 Get-next PDUs
  0 Get-bulk PDUs
  0 Set-request PDUs (Not supported)
0 SNMP packets output
  0 Too big errors (Maximum packet size 512)
  0 No such name errors
  0 Bad values errors
  0 General errors
  0 Response PDUs
  0 Trap PDUs
```

Related Commands	Command	Description
	<b>clear configure snmp-server</b>	Clears the SNMP server configuration.
	<b>clear snmp-server statistics</b>	Clears the SNMP packet input and output counters.
	<b>show running-config snmp-server</b>	Displays the SNMP server configuration.
	<b>snmp-server</b>	Configures the SNMP server.

# show snmp-server user

To display information about the configured characteristics of SNMP users, use the **show snmp-server user** command in privileged EXEC mode.

**show snmp-server user** [*username*]

<b>Syntax Description</b>	<i>username</i> (Optional) Identifies a specific user or users about which to display SNMP information.
---------------------------	---

<b>Defaults</b>	No default behavior or values.
-----------------	--------------------------------

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

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

Command History	Release	Modification
	8.2(1)	This command was introduced.

<b>Examples</b>	The following is sample output from the <b>show snmp-server user</b> command:
-----------------	---

```
hostname# show snmp-server user authuser
User name: authuser
Engine ID: 00000009020000000C025808
storage-type: nonvolatile      active access-list: N/A
Rowstatus: active
Authentication Protocol: MD5
Privacy protocol: DES
Group name: VacmGroupName
```

The output provides the following information:

- The username, which is a string that identifies the name of the SNMP user.
- The engine ID, which is a string that identifies the copy of SNMP on the ASA.
- The storage-type, which indicates whether or not the settings have been set in volatile or temporary memory on the ASA, or in nonvolatile or persistent memory, in which settings remain after the ASA has been turned off and on again.
- The active access list, which is the standard IP access list associated with the SNMP user.
- The Rowstatus, which indicates whether or not it is active or inactive.
- The authentication protocol, which identifies which authentication protocol is being used. Options are MD5, SHA, or none. If authentication is not supported in your software image, this field does not appear.

- The privacy protocol, which indicates whether or not DES packet encryption is enabled. If privacy is not supported in your software image, this field does not appear.
- The group name, which indicates to which SNMP group the user belongs. SNMP groups are defined according to the View-based Access Control Model (VACM).

**Usage Guidelines**

An SNMP user must be part of an SNMP group. If you do not enter the *username* argument, the **show snmp-server user** command displays information about all configured users. If you enter the *username* argument and the user exists, the information about that user appears.

**Related Commands**

Command	Description
<b>clear configure snmp-server</b>	Clears the SNMP server configuration.
<b>show running-config snmp-server</b>	Displays the SNMP server configuration.
<b>snmp-server</b>	Configures the SNMP server.



# show software authenticity file

To display digital signature information related to software authentication for a specific image file, use the **show software authenticity file** command in privileged EXEC mode.

**show software authenticity***[filename]*

## Syntax Description

*filename* (Optional) Identifies a specific image file.

## Defaults

No default behavior or values.

## Command Modes

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

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

## Command History

Release	Modification
9.1(3)	This command was introduced.

## Examples

The following is sample output from the **show software authenticity file** command:

```
hostname# show software authenticity file asa913.SSA
File Name           : disk0:/asa913.SSA
Image type          : Development
  Signer Information
    Common Name      : Cisco
    Organization Unit : ASA5585-X
    Organization Name : Engineering
    Certificate Serial Number : abcd1234efgh5678
    Hash Algorithm    : SHA512
    Signature Algorithm : 2048-bit RSA
    Key Version       : A
```

The output provides the following information:

- The filename, which is the name of the filename in memory.
- The image type, which is the type of image being shown.
- The signer information specifies the signature information, which includes the following:
  - The common name, which is the name of the software manufacturer.
  - The organization unit, which indicates the hardware that the software image is deployed on.
  - The organization name, which is the owner of the software image.
- The certificate serial number, which is the certificate serial number for the digital signature.

- The hash algorithm, which indicates the type of hash algorithm used in digital signature verification.
- The signature algorithm, which identifies the type of signature algorithm used in digital signature verification.
- The key version, which indicates the key version used for verification.

**Related Commands**

Command	Description
<b>show version</b>	Displays the software version, hardware configuration, license key, and related uptime data.

# show ssh sessions

To display information about the active SSH sessions on the ASA, use the **show ssh sessions** command in privileged EXEC mode.

**show ssh sessions** [**hostname** or **A.B.C.D**] [**hostname** or **X:X:X:X::X**] [**detail**]

## Syntax Description

<b>hostname</b> or <b>A.B.C.D</b>	(Optional) Displays SSH session information for only the specified SSH client IPv4 address.
<b>hostname</b> or <b>X:X:X:X::X</b>	(Optional) Displays SSH session information for only the specified SSH client IPv6 address.
<b>detail</b>	Displays detailed SSH session information.

## Defaults

No default behavior or values.

## Command Modes

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

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

## Command History

Release	Modification
7.0(1)	This command was introduced.
9.1(2)	The <b>detail</b> option was added.

## Usage Guidelines

The SID is a unique number that identifies the SSH session. The Client IP is the IP address of the system running an SSH client. The Version is the protocol version number that the SSH client supports. If the SSH only supports SSH version 1, then the Version column displays 1.5. If the SSH client supports both SSH version 1 and SSH version 2, then the Version column displays 1.99. If the SSH client only supports SSH version 2, then the Version column displays 2.0. The Encryption column shows the type of encryption that the SSH client is using. The State column shows the progress that the client is making as it interacts with the ASA. The Username column lists the login username that has been authenticated for the session. The Mode column describes the direction of the SSH data streams.

For SSH version 2, which can use the same or different encryption algorithms, the Mode field displays in and out. For SSH version 1, which uses the same encryption in both directions, the Mode field displays nil ('-') and allows only one entry per connection.

**Examples**

The following is sample output from the **show ssh sessions** command:

```
hostname# show ssh sessions
SID Client IP      Version Mode Encryption Hmac      State      Username
0   172.69.39.39     1.99  IN   aes128-cbc md5      SessionStarted pat
                                OUT   aes128-cbc md5      SessionStarted pat
1   172.23.56.236    1.5   -    3DES      -        SessionStarted pat
2   172.69.39.29     1.99  IN   3des-cbc  sha1     SessionStarted pat
                                OUT   3des-cbc  sha1     SessionStarted pat
```

The following is sample output from the **show ssh sessions detail** command:

```
hostname# show ssh sessions detail
SSH Session ID      : 0
> Client IP         : 161.44.66.200
> Username          : root
> SSH Version       : 2.0
> State             : SessionStarted
> Inbound Statistics
> Encryption        : aes256-cbc
> HMAC              : sha1
> Bytes Received    : 2224
> Outbound Statistics
> Encryption        : aes256-cbc
> HMAC              : sha1
> Bytes Transmitted  : 2856
> Rekey Information
> Time Remaining (sec) : 3297
> Data Remaining (bytes): 996145356
> Last Rekey         : 16:17:19.732 EST Wed Jan 2 2013
> Data-Based Rekeys  : 0
> Time-Based Rekeys  : 0
```

**Related Commands**

Command	Description
<b>ssh disconnect</b>	Disconnects an active SSH session.
<b>ssh timeout</b>	Sets the timeout value for idle SSH sessions.

# show ssl

To display information about the active SSL sessions on the ASA, use the **show ssl** command in privileged EXEC mode.

**show ssl** [**cache** | **errors** | **mib** | **objects** | **detail**]

## Syntax Description

<b>cache</b>	(Optional) Displays SSL session cache statistics.
<b>errors</b>	(Optional) Displays SSL errors.
<b>mib</b>	(Optional) Displays SSL MIB statistics.
<b>objects</b>	(Optional) Displays SSL object statistics.
<b>detail</b>	Displays detailed SSH session information.

## Defaults

No default behavior or values.

## Command Modes

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

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

## Command History

Release	Modification
8.4(1)	This command was introduced.
9.1(2)	The <b>detail</b> option was added.

## Usage Guidelines

This command shows information about the current SSLv2 and SSLv3 sessions, including the enabled cipher order, which ciphers are disabled, SSL trustpoints being used, and whether or not certificate authentication is enabled.

## Examples

The following is sample output from the **show ssl** command:

```
hostname# show ssl
```

```
Accept connections using SSLv2, SSLv3 or TLSv1 and negotiate to SSLv3 or TLSv1
Start connections using SSLv3 and negotiate to SSLv3 or TLSv1
Enabled cipher order: rc4-sha1 dhe-aes128-sha1 dhe-aes256-sha1 aes128-sha1 aes256-sha1
3des-sha1
Disabled ciphers: des-sha1 rc4-md5 null-sha1
SSL trust-points:
  inside interface: interfaceA
  outside interface: interfaceB
Certificate authentication is not enabled
```

The following is sample output from the **show ssh sessions detail** command:

```
hostname# show ssh sessions detail
SSH Session ID      : 0
> Client IP         : 161.44.66.200
> Username          : root
> SSH Version       : 2.0
> State             : SessionStarted
> Inbound Statistics
>   Encryption      : aes256-cbc
>   HMAC            : sha1
>   Bytes Received   : 2224
> Outbound Statistics
>   Encryption      : aes256-cbc
>   HMAC            : sha1
>   Bytes Transmitted : 2856
> Rekey Information
>   Time Remaining (sec) : 3297
>   Data Remaining (bytes): 996145356
>   Last Rekey        : 16:17:19.732 EST Wed Jan 2 2013
>   Data-Based Rekeys  : 0
>   Time-Based Rekeys  : 0
```

#### Related Commands

Command	Description
<b>license-server port</b>	Sets the port on which the server listens for SSL connections from participants.

# show startup-config

To show the startup configuration or to show any errors when the startup configuration loaded, use the **show startup-config** command in privileged EXEC mode.

**show startup-config [errors]**

Syntax Description	errors	(Optional) Shows any errors that were generated when the ASA loaded the startup configuration.
--------------------	--------	--

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

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

Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple Context	System <sup>1</sup>
Privileged EXEC	•	•	•	•	•

1. The **errors** keyword is only available in single mode and the system execution space.

Command History	Release	Modification
	7.0(1)	The <b>errors</b> keyword was added.
	8.3(1)	The command output displays encrypted passwords.

Usage Guidelines	In multiple context mode, the <b>show startup-config</b> command shows the startup configuration for your current execution space: the system configuration or the security context.
------------------	--

The **show startup-config** command output displays encrypted, masked, or clear text passwords when password encryption is either enabled or disabled.

To clear the startup errors from memory, use the **clear startup-config errors** command.

Examples	The following is sample output from the <b>show startup-config</b> command:
----------	---

```
hostname# show startup-config
: Saved
: Written by enable_15 at 01:44:55.598 UTC Thu Apr 17 2003

Version 7.X(X)
!
interface GigabitEthernet0/0
 nameif inside
 security-level 100
 ip address 209.165.200.224
 webvpn enable
```

## show startup-config

```

!
interface GigabitEthernet0/1
 shutdown
 nameif test
 security-level 0
 ip address 209.165.200.225
!

...
!
enable password 8Ry2YjIyt7RRXU24 encrypted
passwd 2KFQnbNIdI.2KYOU encrypted
hostname firewall1
domain-name example.com
boot system disk0:/cdisk.bin
ftp mode passive
names
name 10.10.4.200 outside
access-list xyz extended permit ip host 192.168.0.4 host 209.165.200.226
!
ftp-map ftp_map
!
ftp-map inbound_ftp
 deny-request-cmd appe stor stou
!

...

Cryptochecksum:4edf97923899e712ed0da8c338e07e63

```

The following is sample output from the **show startup-config errors** command:

```
hostname# show startup-config errors
```

```

ERROR: 'Mac-addresses': invalid resource name
*** Output from config line 18, "limit-resource Mac-add..."
INFO: Admin context is required to get the interfaces
*** Output from config line 30, "arp timeout 14400"
Creating context 'admin'... WARNING: Invoked the stub function ibm_4gs3_context_
set_max_mgmt_sess
WARNING: Invoked the stub function ibm_4gs3_context_set_max_mgmt_sess
Done. (1)
*** Output from config line 33, "admin-context admin"
WARNING: VLAN *24* is not configured.
*** Output from config line 12, context 'admin', "nameif inside"
.....
*** Output from config line 37, "config-url disk:/admin..."

```

## Related Commands

Command	Description
<b>clear startup-config errors</b>	Clears the startup errors from memory.
<b>show running-config</b>	Shows the running configuration.



# show sunrpc-server active

To display the pinholes open for Sun RPC services, use the **show sunrpc-server active** command in privileged EXEC mode.

## show sunrpc-server active

### Defaults

No default behavior or values.

### Command Modes

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

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

### Command History

Release	Modification
7.0(1)	This command was introduced.

### Usage Guidelines

Use the **show sunrpc-server active** command to display the pinholes open for Sun RPC services, such as NFS and NIS.

### Examples

To display the pinholes open for Sun RPC services, enter the **show sunrpc-server active** command. The following is sample output from the **show sunrpc-server active** command:

```
hostname# show sunrpc-server active
      LOCAL          FOREIGN          SERVICE TIMEOUT
-----
192.168.100.2/0 209.165.200.5/32780    100005 00:10:00
```

### Related Commands

Command	Description
<b>clear configure sunrpc-server</b>	Clears the Sun remote processor call services from the ASA.
<b>clear sunrpc-server active</b>	Clears the pinholes opened for Sun RPC services, such as NFS or NIS.
<b>inspect sunrpc</b>	Enables or disables Sun RPC application inspection and configures the port used.
<b>show running-config sunrpc-server</b>	Displays information about the SunRPC services configuration.

# show switch mac-address-table

For models with a built-in switch, such as the ASA 5505 adaptive security appliance, use the **show switch mac-address-table** command in privileged EXEC mode to view the switch MAC address table.

**show switch mac-address-table**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values.

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

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

Release	Modification
7.2(1)	This command was introduced.

**Usage Guidelines** This command is for models with built-in switches only. The switch MAC address table maintains the MAC address-to-switch port mapping for traffic within each VLAN in the switch hardware. If you are in transparent firewall mode, use the **show mac-address-table** command to view the bridge MAC address table in the ASA software. The bridge MAC address table maintains the MAC address-to-VLAN interface mapping for traffic that passes between VLANs.

MAC address entries age out in 5 minutes.

**Examples** The following is sample output from the **show switch mac-address-table** command.

```
hostname# show switch mac-address-table
Legend: Age - entry expiration time in seconds

  Mac Address | VLAN |      Type      | Age | Port
-----|-----|-----|-----|-----
000e.0c4e.2aa4 | 0001 |    dynamic    | 287 | Et0/0
0012.d927.fb03 | 0001 |    dynamic    | 287 | Et0/0
0013.c4ca.8a8c | 0001 |    dynamic    | 287 | Et0/0
00b0.6486.0c14 | 0001 |    dynamic    | 287 | Et0/0
00d0.2bff.449f | 0001 |    static     | -   | In0/1
0100.5e00.000d | 0001 | static multicast | -   | In0/1,Et0/0-7
Total Entries: 6
```

Table 58-4 shows each field description:

**Table 58-4** *show switch mac-address-table Fields*

Field	Description
Mac Address	Shows the MAC address.
VLAN	Shows the VLAN associated with the MAC address.
Type	Shows if the MAC address was learned dynamically, as a static multicast address, or statically. The only static entry is for the internal backplane interface.
Age	Shows the age of a dynamic entry in the MAC address table.
Port	Shows the switch port through which the host with the MAC address can be reached.

#### Related Commands

Command	Description
<b>show mac-address-table</b>	Shows the MAC address table for models that do not have a built-in switch.
<b>show switch vlan</b>	Shows the VLAN and physical MAC address association.

# show switch vlan

For models with a built-in switch, such as the ASA 5505 adaptive security appliance, use the **show switch vlan** command in privileged EXEC mode to view the VLANs and the associated switch ports.

**show switch vlan**

**Syntax Description** This command has no arguments or keywords.

**Defaults** No default behavior or values.

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

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

Release	Modification
7.2(1)	This command was introduced.

**Usage Guidelines** This command is for models with built-in switches only. For other models, use the **show vlan** command.

**Examples** The following is sample output from the **show switch vlan** command.

```
hostname# show switch vlan

VLAN Name                               Status    Ports
-----
100  inside                               up        Et0/0, Et0/1
200  outside                              up        Et0/7
300  -                                    down      Et0/1, Et0/2
400  backup                               down      Et0/3
```

Table 58-4 shows each field description:

Table 58-5 show switch vlan Fields

Field	Description
VLAN	Shows the VLAN number.
Name	Shows the name of the VLAN interface. If no name is set using the <b>nameif</b> command, or if there is no <b>interface vlan</b> command, the display shows a dash (-).

**Table 58-5** *show switch vlan Fields (continued)*

Field	Description
Status	Shows the status, up or down, to receive and send traffic to and from the VLAN in the switch. At least one switch port in the VLAN needs to be in an up state for the VLAN state to be up.
Ports	Shows the switch ports assigned to each VLAN. If a switch port is listed for multiple VLANs, it is a trunk port. The above sample output shows Ethernet 0/1 is a trunk port that carries VLAN 100 and 300.

**Related Commands**

Command	Description
<b>clear interface</b>	Clears counters for the <b>show interface</b> command.
<b>interface vlan</b>	Creates a VLAN interface and enters interface configuration mode.
<b>show interface</b>	Displays the runtime status and statistics of interfaces.
<b>show vlan</b>	Shows the VLANs for models that do not have built-in switches.
<b>switchport mode</b>	Sets the mode of the switch port to access or trunk mode.

