



## logging asdm through logout message Commands

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# logging asdm

To send system log messages to the ASDM log buffer, use the **logging asdm** command in global configuration mode. To disable logging to the ASDM log buffer, use the **no** form of this command.

```
logging asdm [logging_list | level]

no logging asdm [logging_list | level]
```

Syntax Description	<div> <div>level</div> <div> Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows: <ul style="list-style-type: none"> <li><b>0</b> or <b>emergencies</b>—System unusable.</li> <li><b>1</b> or <b>alerts</b>—Take immediate action.</li> <li><b>2</b> or <b>critical</b>—Critical condition.</li> <li><b>3</b> or <b>errors</b>—Error.</li> <li><b>4</b> or <b>warnings</b>—Warning.</li> <li><b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li><b>6</b> or <b>informational</b>—Information.</li> <li><b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul> </div> </div>
	<div> <div>logging_list</div> <div> Specifies the list that identifies the messages to send to the ASDM log buffer. For information about creating lists, see the <b>logging list</b> command. </div> </div>

Defaults ASDM logging 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	•	•	•	•	•

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

Usage Guidelines Before any messages are sent to the ASDM log buffer, you must enable logging using the **logging enable** command.

When the ASDM log buffer is full, security appliance deletes the oldest message to make room in the buffer for new messages. To control the number of system log messages retained in the ASDM log buffer, use the **logging asdm-buffer-size** command.

The ASDM log buffer is a different buffer than the log buffer enabled by the **logging buffered** command.

### Examples

This example shows how enable logging and send to the ASDM log buffer messages of severity levels 0, 1, and 2. It also shows how to set the ASDM log buffer size to 200 messages.

```
hostname(config)# logging enable
hostname(config)# logging asdm 2
hostname(config)# logging asdm-buffer-size 200
hostname(config)# show logging
Syslog logging: enabled
  Facility: 20
  Timestamp logging: disabled
  Standby logging: disabled
  Deny Conn when Queue Full: disabled
  Console logging: disabled
  Monitor logging: disabled
  Buffer logging: disabled
  Trap logging: disabled
  History logging: disabled
  Device ID: disabled
  Mail logging: disabled
  ASDM logging: level critical, 48 messages logged
```

### Related Commands

Command	Description
<b>clear logging asdm</b>	Clears the ASDM log buffer of all messages it contains.
<b>logging asdm-buffer-size</b>	Specifies the number of ASDM messages retained in the ASDM log buffer
<b>logging enable</b>	Enables logging.
<b>logging list</b>	Creates a reusable list of message selection criteria.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging configuration.

# logging asdm-buffer-size

To specify the number of system log messages retained in the ASDM log buffer, use the **logging asdm-buffer-size** command in global configuration mode. To reset the ASDM log buffer to its default size of 100 messages, use the **no** form of this command.

```
logging asdm-buffer-size num_of_msgs

no logging asdm-buffer-size num_of_msgs
```

Syntax Description	num_of_msgs	Specifies the number of system log messages that the security appliance retains in the ASDM log buffer.
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Defaults	The default ASDM syslog buffer size is 100 messages.
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Command Modes	The following table shows the modes in which you can enter the command:
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Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple	
				Context	System
Global configuration	•	•	•	•	—

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

**Usage Guidelines**

When the ASDM log buffer is full, security appliance deletes the oldest message to make room in the buffer for new messages. To control whether logging to the ASDM log buffer is enabled or to control the kind of system log messages retained in the ASDM log buffer, use the **logging asdm** command.

The ASDM log buffer is a different buffer than the log buffer enabled by the **logging buffered** command.

**Examples**

This example shows how enable logging and send to the ASDM log buffer messages of severity levels 0, 1, and 2. It also shows how to set the ASDM log buffer size to 200 messages.

```
hostname(config)# logging enable
hostname(config)# logging asdm 2
hostname(config)# logging asdm-buffer-size 200
hostname(config)# show logging
Syslog logging: enabled
  Facility: 20
  Timestamp logging: disabled
  Standby logging: disabled
  Deny Conn when Queue Full: disabled
  Console logging: disabled
  Monitor logging: disabled
```

```
Buffer logging: disabled
Trap logging: disabled
History logging: disabled
Device ID: disabled
Mail logging: disabled
ASDM logging: level critical, 48 messages logged
```

**Related Commands**

Command	Description
<b>clear logging asdm</b>	Clears the ASDM log buffer of all messages it contains.
<b>logging asdm</b>	Enables logging to the ASDM log buffer.
<b>logging enable</b>	Enables logging.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.

# logging buffered

To enable the security appliance to send system log messages to the log buffer, use the **logging buffered** command in global configuration mode. To disable logging to the log buffer, use the **no** form of this command.

**logging buffered** [*logging\_list* | *level*]

**no logging buffered** [*logging\_list* | *level*]

## Syntax Description

<i>level</i>	Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows: <ul style="list-style-type: none"> <li>• <b>0</b> or <b>emergencies</b>—System unusable.</li> <li>• <b>1</b> or <b>alerts</b>—Take immediate action.</li> <li>• <b>2</b> or <b>critical</b>—Critical condition.</li> <li>• <b>3</b> or <b>errors</b>—Error.</li> <li>• <b>4</b> or <b>warnings</b>—Warning.</li> <li>• <b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li>• <b>6</b> or <b>informational</b>—Information.</li> <li>• <b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul>
<i>logging_list</i>	Specifies the list that identifies the messages to send to the log buffer. For information about creating lists, see the <b>logging list</b> command.

## Defaults

- The defaults are as follows:
- Logging to the buffer is disabled.
  - Buffer size is 4 KB.

## Command Modes

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

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

## Command History

Release	Modification
Preexisting	This command was preexisting.

### Usage Guidelines

Before any messages are sent to the log buffer, you must enable logging using the **logging enable** command.

New messages append to the end of the buffer. When the buffer fills up, the security appliance clears it and continues adding messages to it. When the log buffer is full, security appliance deletes the oldest message to make room in the buffer for new messages. You can have buffer contents automatically saved each time the contents of the buffer have “wrapped”, meaning that all the messages since the last save have been replaced by new messages. For more information, see the **logging flash-bufferwrap** and **logging ftp-bufferwrap** commands.

At any time, you can save the contents of the buffer to Flash memory. For more information, see the **logging saveolog** command.

System Log messages sent to the buffer can be viewed with the **show logging** command.

### Examples

This example configures logging to the buffer for level 0 and level 1 events:

```
hostname(config)# logging buffered alerts
hostname(config)#
```

This example creates a list named notif-list with a maximum logging level of 7 and configures logging to the buffer for system log messages identified by the notif-list list.

```
hostname(config)# logging list notif-list level 7
hostname(config)# logging buffered notif-list
hostname(config)#
```

### Related Commands

Command	Description
<b>clear logging buffer</b>	Clears the log buffer of all system log messages it contains.
<b>logging buffer-size</b>	Specifies log buffer size.
<b>logging enable</b>	Enables logging.
<b>logging flash-bufferwrap</b>	Writes the log buffer to Flash memory when the log buffer is full.
<b>logging ftp-bufferwrap</b>	Sends the log buffer to an FTP server when the log buffer is full.
<b>logging list</b>	Creates a reusable list of message selection criteria.
<b>logging saveolog</b>	Saves the contents of the log buffer to Flash memory.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.

# logging buffer-size

To specify the size of the log buffer, use the **logging buffer-size** command in global configuration mode. To reset the log buffer to its default size of 4 KB of memory, use the **no** form of this command.

**logging buffer-size** *bytes*

**no logging buffer-size** *bytes*

<b>Syntax Description</b>	<i>bytes</i>	Sets the amount of memory used for the log buffer, in bytes. For example, if you specify 8192, the security appliance uses 8 KB of memory for the log buffer.
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<b>Defaults</b>	The log buffer size is 4 KB of memory.
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<b>Command Modes</b>	The following table shows the modes in which you can enter the command:
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Command Mode	Firewall Mode		Security Context		
	Routed	Transparent	Single	Multiple Context	System
Global configuration	•	•	•	•	•

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

<b>Usage Guidelines</b>	<p>To see whether the security appliance is using a log buffer of a size other than the default buffer size, use the <b>show running-config logging</b> command. If the <b>logging buffer-size</b> command is not shown, then the security appliance uses a log buffer of 4 KB.</p> <p>For more information about how the security appliance uses the buffer, see the <b>logging buffered</b> command.</p>
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<b>Examples</b>	<p>This example enables logging, enables the logging buffer, and specifies that the security appliance uses 16 KB of memory for the log buffer:</p> <pre>hostname(config)# logging enable hostname(config)# logging buffered hostname(config)# logging buffer-size 16384 hostname(config)#</pre>
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## Related Commands



Command	Description
<b>clear logging buffer</b>	Clears the log buffer of all system log messages it contains.
<b>logging buffered</b>	Enables logging to the log buffer.
<b>logging enable</b>	Enables logging.
<b>logging flash-bufferwrap</b>	Writes the log buffer to Flash memory when the log buffer is full.
<b>logging savelog</b>	Saves the contents of the log buffer to Flash memory.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.

# logging class

To configure for a message class the maximum logging level per logging destination, use the **logging class** command in global configuration mode. To remove a message class logging level configuration, use the **no** form of the command.

**logging class** *class destination level [destination level . . .]*

**no logging class** *class*

## Syntax Description

<i>class</i>	Specifies the message class whose maximum logging levels per destination you are configuring. For valid values of class, see the “Usage Guidelines” section that follows.
<i>destination</i>	Specifies a logging destination for <i>class</i> . For the destination, the <i>level</i> determines the maximum logging level sent to <i>destination</i> . For valid values of <i>destination</i> , see the “Usage Guidelines” section that follows.
<i>level</i>	Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows: <ul style="list-style-type: none"> <li>• <b>0</b> or <b>emergencies</b>—System unusable.</li> <li>• <b>1</b> or <b>alerts</b>—Take immediate action.</li> <li>• <b>2</b> or <b>critical</b>—Critical condition.</li> <li>• <b>3</b> or <b>errors</b>—Error.</li> <li>• <b>4</b> or <b>warnings</b>—Warning.</li> <li>• <b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li>• <b>6</b> or <b>informational</b>—Information.</li> <li>• <b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul>

## Defaults

By default, the security appliance does not apply logging levels on a logging destination and message class basis. Instead, each enabled logging destination receives messages for all classes at the logging level determined by the logging list or level specified when you enabled the logging destination.

## Command Modes

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

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

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

### Usage Guidelines

Valid values for *class* include the following:

- **auth**—User authentication
- **bridge**—Transparent firewall
- **ca**—PKI certificate authority
- **config**—Command interface
- **email**—Email proxy
- **ha**—Failover
- **ids**—Intrusion detection system
- **ip**—IP stack
- **np**—Network processor
- **ospf**—OSPF routing
- **rip**—RIP routing
- **session**—User session
- **snmp**—SNMP
- **sys**—System
- **vpn**—IKE and IPSec
- **vpnc**—VPN client
- **vpnfo**—VPN failover
- **vpnlb**—VPN load balancing

Valid logging destinations are as follows:

- **asdm**—To learn about this destination, see the **logging asdm** command.
- **buffered**—To learn about this destination, see the **logging buffered** command.
- **console**—To learn about this destination, see the **logging console** command.
- **history**—To learn about this destination, see the **logging history** command.
- **mail**—To learn about this destination, see the **logging mail** command.
- **monitor**—To learn about this destination, see the **logging monitor** command.
- **trap**—To learn about this destination, see the **logging trap** command.

### Examples

This example specifies that, for Failover-related messages, the maximum logging level for the ASDM log buffer is 2 and the maximum logging level for the system log buffer is 7:

```
hostname(config)# logging class ha asdm 2 buffered 7
hostname(config)#
```

Related Commands	Command	Description
	logging enable	Enables logging.
	show logging	Displays the enabled logging options.
	show running-config logging	Displays the logging-related portion of the running configuration.

# logging console

To enable the security appliance to display system log messages in console sessions, use the **logging console** command in global configuration mode. To disable the display of system log messages in console sessions, use the **no** form of this command.

**logging console** [*logging\_list* | *level*]

**no logging console**



## Note

We recommend that you do not use this command because it may cause many system log messages to be dropped due to buffer overflow. For more information, see the “Usage Guidelines” section that follows.

## Syntax Description

<i>level</i>	Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows: <ul style="list-style-type: none"> <li>• <b>0</b> or <b>emergencies</b>—System unusable.</li> <li>• <b>1</b> or <b>alerts</b>—Take immediate action.</li> <li>• <b>2</b> or <b>critical</b>—Critical condition.</li> <li>• <b>3</b> or <b>errors</b>—Error.</li> <li>• <b>4</b> or <b>warnings</b>—Warning.</li> <li>• <b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li>• <b>6</b> or <b>informational</b>—Information.</li> <li>• <b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul>
<i>logging_list</i>	Specifies the list that identifies the messages to send to the console session. For information about creating lists, see the <b>logging list</b> command.

## Defaults

The security appliance does not display system log messages in console sessions 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	•	•	•	•	•

### Command History

Release	Modification
Preexisting	This command was preexisting.

### Usage Guidelines

Before any messages are sent to the console, you must enable logging using the **logging enable** command.



### Caution

Using the **logging console** command could drastically degrade system performance. Instead, use the **logging buffered** command to start logging and the **show logging** command to see the messages. To make viewing the most current messages easier, use the **clear logging buffer** command to clear the buffer.

### Examples

This example shows how to enable system log messages of levels 0, 1, 2, and 3 to appears in console sessions:

```
hostname(config)# logging enable
hostname(config)# logging console errors
hostname(config)#
```

### Related Commands

Command	Description
<b>logging enable</b>	Enables logging.
<b>logging list</b>	Creates a reusable list of message selection criteria.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.

# logging debug-trace

To redirect debugging messages to logs as syslog message 711001 issued at severity level 7, use the **logging debug-trace** command in global configuration mode. To stop sending debugging messages to logs, use the **no** form of this command.

**logging debug-trace**

**no logging debug-trace**

## Syntax Description

This command has no arguments or keywords.

## Defaults

By default, the security appliance does not include debug output in system log messages.

## Command Modes

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

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

## Command History

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

## Usage Guidelines

Debug messages are generated as severity level 7 messages. They appear in logs with the syslog message number 711001.

## Examples

This example shows how enable logging, send log messages to the system log buffer, redirect debugging output to logs, and turn on debugging disk activity.

```
hostname(config)# logging enable
hostname(config)# logging buffered
hostname(config)# logging debug-trace
hostname(config)# debug disk filesystem
```

An example of a debug message that could appear in the logs follows:

```
%PIX-7-711001: IFS: Read: fd 3, bytes 4096
```

## Related Commands

Command	Description
<b>logging enable</b>	Enables logging.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.



# logging device-id

To configure the security appliance to include a device ID in non-EMBLEM-format system log messages, use the **logging device-id** command in global configuration mode. To disable the use of a device ID, use the **no** form of this command.

**logging device-id** { **context-name** | **hostname** | **ipaddress** *interface\_name* | **string** *text* }

**no logging device-id** { **context-name** | **hostname** | **ipaddress** *interface\_name* | **string** *text* }

## Syntax Description

<b>context-name</b>	Use the name of the current context as the device ID.
<b>hostname</b>	Use the host name of the security appliance as the device ID.
<b>ipaddress</b> <i>interface_name</i>	Use as the device ID the IP address of the interface specified as <i>interface_name</i> . If you use the <b>ipaddress</b> keyword, system log messages sent to an external server contain the IP address of the interface specified, regardless of which interface the security appliance uses to send the log data to the external server.
<b>string</b> <i>text</i>	Use as the device ID the characters contained in <i>text</i> , which can be up to 16 characters long. You cannot use white space characters or any of the following characters in <i>text</i> : <ul style="list-style-type: none"> <li>• &amp;—ampersand</li> <li>• '—single quote</li> <li>• "—double quote</li> <li>• &lt;—less than</li> <li>• &gt;—greater than</li> <li>• ?—question mark</li> </ul>

## Defaults

No default device ID is used in system log messages.

## Command Modes

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

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

## Command History

Release	Modification
Preexisting	This command was preexisting.

Usage Guidelines

If you use the **ipaddress** keyword, the device ID becomes the specified security appliance interface IP address, regardless of the interface from which the message is sent. This keyword provides a single, consistent device ID for all messages that are sent from the device.

Examples

This example shows how to configure a host named secappl-1:

```
hostname(config)# logging device-id hostname
hostname(config)# show logging
Syslog logging: disabled
Facility: 20
Timestamp logging: disabled
Standby logging: disabled
Console logging: disabled
Monitor logging: disabled
Buffer logging: level informational, 991 messages logged
Trap logging: disabled
History logging: disabled
Device ID: hostname "secappl-1"
```

In syslog messages, the host name secappl-1 appears at the beginning of messages, such as the following message:

```
secappl-1 %PIX-5-111008: User 'enable_15' executed the 'logging buffer-size 4096' command.
```

Related Commands

Command	Description
logging enable	Enables logging.
show logging	Displays the enabled logging options.
show running-config logging	Displays the logging-related portion of the running configuration.

# logging emblem

To use the EMBLEM format for system log messages sent to destinations other than a syslog server, use the **logging emblem** command in global configuration mode. To disable the use of EMBLEM format, use the **no** form of this command.

**logging emblem**

**no logging emblem**

## Syntax Description

This command has no arguments or keywords.

## Defaults

By default, the security appliance does not use EMBLEM format for system log messages.

## Command Modes

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

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

## Command History

Release	Modification
7.0(1)(1)	This command was changed to be independent of the <b>logging host</b> command.

## Usage Guidelines

The **logging emblem** command lets you to enable EMBLEM-format logging for all logging destinations other than syslog servers. If you also enable the **logging timestamp** keyword, the messages with a time stamp are sent.

To enable EMBLEM-format logging for syslog servers, use the **format emblem** option with the **logging host** command.

## Examples

This example shows how to enable logging and enable the use of EMBLEM-format for logging to all logging destinations except syslog servers:

```
hostname(config)# logging enable
hostname(config)# logging emblem
hostname(config)#
```

## Related Commands

Command	Description
<b>logging enable</b>	Enables logging.

Command	Description
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.

# logging enable

To enable logging for all configured output locations, use the **logging enable** command in global configuration mode. To disable logging, use the **no** form of this command.

**logging enable**

**no logging enable**

## Syntax Description

This command has no arguments or keywords.

## Defaults

Logging 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	•	•	•	•	•

## Command History

Release	Modification
7.0(1)(1)	This command was changed from the <b>logging on</b> command.

## Usage Guidelines

The **logging enable** command allows you to enable or disable sending system log messages to any of the supported logging destinations. You can stop all logging with the **no logging enable** command.

You can enable logging to individual logging destinations with the following commands:

- **logging asdm**
- **logging buffered**
- **logging console**
- **logging history**
- **logging mail**
- **logging monitor**
- **logging trap**

## Examples

This example shows how to enable logging. The output of the **show logging** command illustrates how each possible logging destination must be enabled separately.

```
hostname(config)# logging enable
hostname(config)# show logging
Syslog logging: enabled
```

■ logging enable

```
Facility: 20
Timestamp logging: disabled
Standby logging: disabled
Deny Conn when Queue Full: disabled
Console logging: disabled
Monitor logging: disabled
Buffer logging: disabled
Trap logging: disabled
History logging: disabled
Device ID: disabled
Mail logging: disabled
ASDM logging: disabled
```

Related Commands	Command	Description
	show logging	Displays the enabled logging options.
	show running-config logging	Displays the logging-related portion of the running configuration.

# logging facility

To specify the logging facility used for messages sent to syslog servers, use the **logging facility** command in global configuration mode. To reset the logging facility to its default of 20, use the **no** form of this command.

**logging facility** *facility*

**no logging facility**

## Syntax Description

*facility* Specifies the syslog facility; valid values are 16 through 23.

## Defaults

The default facility is 20 (LOCAL4).

## Command Modes

The following table shows the modes in which you can enter the command, with the exceptions noted above in the Syntax Description section:

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

## Command History

Release	Modification
Preexisting	This command was preexisting.

## Usage Guidelines

Syslog servers file messages based on the *facility* number in the message. There are eight possible facilities, 16 (LOCAL0) through 23 (LOCAL7).

## Examples

This example shows how to specify that the security appliance specify the logging facility as 16 in system log messages. The output of the **show logging** command includes the facility being used by the security appliance.

```
hostname(config)# logging facility 16
hostname(config)# show logging
Syslog logging: enabled
  Facility: 16
  Timestamp logging: disabled
  Standby logging: disabled
  Deny Conn when Queue Full: disabled
  Console logging: disabled
  Monitor logging: disabled
  Buffer logging: disabled
  Trap logging: level errors, facility 16, 3607 messages logged
    Logging to infrastructure 10.1.2.3
```

```
History logging: disabled
Device ID: 'inside' interface IP address "10.1.1.1"
Mail logging: disabled
ASDM logging: disabled
```

Related Commands	Command	Description
	logging enable	Enables logging.
	logging host	Defines a syslog server.
	logging trap	Enables logging to syslog servers.
	show logging	Displays the enabled logging options.
	show running-config logging	Displays the logging-related portion of the running configuration.



# logging flash-bufferwrap

To enable the security appliance to write the log buffer to Flash memory every time the buffer is full of messages that have never been saved, use the **logging flash-bufferwrap** command in global configuration mode. To disable writing of the log buffer to Flash memory, use the **no** form of this command.

**logging flash-bufferwrap**

**no logging flash-bufferwrap**

## Syntax Description

This command has no arguments or keywords.

## Defaults

The defaults are as follows:

- Logging to the buffer is disabled.
- Writing the log buffer to Flash memory is disabled.
- Buffer size is 4 KB.
- Minimum free Flash memory is 3 MB.
- Maximum Flash memory allocation for buffer logging is 1 MB.

## Command Modes

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

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

## Command History

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

## Usage Guidelines

For the security appliance to write the log buffer to Flash memory, you must enable logging to the buffer; otherwise, the log buffer never has data to be written to Flash memory. To enable logging to the buffer, use the **logging buffered** command.

While the security appliance writes log buffer contents to Flash memory, it continues storing to the log buffer continues any new event messages.

The security appliance creates log files with names that use a default time-stamp format, as follows:

LOG-YYYY-MM-DD-HHMMSS.TXT

where *YYYY* is the year, *MM* is the month, *DD* is the day of the month, and *HHMMSS* is the time in hours, minutes, and seconds.

The availability of Flash memory affects how the security appliance saves system log messages using the **logging flash-bufferwrap** command. For more information, see the **logging flash-maximum-allocation** and the **logging flash-minimum-free** commands.

**Examples**

This example shows how enable logging, enable the log buffer, and enable the security appliance to write the log buffer to Flash memory:

```
hostname(config)# logging enable
hostname(config)# logging buffered
hostname(config)# logging flash-bufferwrap
hostname(config)#
```

**Related Commands**

Command	Description
<b>clear logging buffer</b>	Clears the log buffer of all system log messages it contains.
<b>copy</b>	Copies a file from one location to another, including to a TFTP or FTP server.
<b>delete</b>	Deletes a file from the disk partition, such as saved log files.
<b>logging buffered</b>	Enables logging to the log buffer.
<b>logging buffer-size</b>	Specifies log buffer size.
<b>logging enable</b>	Enables logging.
<b>logging flash-maximum-allocation</b>	Specifies the maximum amount of Flash memory that can be used for writing log buffer contents.
<b>logging flash-minimum-free</b>	Specifies the minimum amount of Flash memory that must be available for the security appliance to permit writing the log buffer to Flash memory.
<b>show logging</b>	Displays the enabled logging options.

# logging flash-maximum-allocation

To specify the maximum amount of Flash memory that the security appliance uses to store log data, use the **logging flash-maximum-allocation** command in global configuration mode. This command determines how much Flash memory is available for the **logging savelog** and **logging flash-bufferwrap** commands. To reset the maximum amount of Flash memory used for this purpose to its default size of 1 MB of Flash memory, use the **no** form of this command.

**logging flash-maximum-allocation** *kbytes*

**no logging flash-maximum-allocation** *kbytes*

## Syntax Description

*kbytes* The largest amount of Flash memory, in kilobytes, that the security appliance can use to save log buffer data.

## Defaults

The default maximum Flash memory allocation for log data is 1 MB.

## Command Modes

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

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

## Command History

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

## Usage Guidelines

If a log file to be saved by **logging savelog** or **logging flash-bufferwrap** causes Flash memory use for log files to exceed the maximum amount specified by the **logging flash-maximum-allocation** command, the security appliance deletes the oldest log files to free sufficient memory for the new log file. If there are no files to delete or if, after all old files are deleted, free memory is too small for the new log file, the security appliance fails to save the new log file.

To see whether the security appliance has a maximum Flash memory allocation of a size different than the default size, use the **show running-config logging** command. If the **logging flash-maximum-allocation** command is not shown, then the security appliance uses a maximum of 1 MB for saved log buffer data. The memory allocated is used for both the **logging savelog** and **logging flash-bufferwrap** commands.

For more information about how the security appliance uses the log buffer, see the **logging buffered** command.

**Examples**

This example shows how to enable logging, enable the log buffer, enable the security appliance to write the log buffer to Flash memory, with the maximum amount of Flash memory used for writing log files set to approximately 1.2 MB of memory:

```
hostname(config)# logging enable
hostname(config)# logging buffered
hostname(config)# logging flash-bufferwrap
hostname(config)# logging flash-maximum-allocation 1200
hostname(config)#
```

**Related Commands**

Command	Description
<b>clear logging buffer</b>	Clears the log buffer of all system log messages it contains.
<b>logging buffered</b>	Enables logging to the log buffer.
<b>logging enable</b>	Enables logging.
<b>logging flash-bufferwrap</b>	Writes the log buffer to Flash memory when the log buffer is full.
<b>logging flash-minimum-free</b>	Specifies the minimum amount of Flash memory that must be available for the security appliance to permit writing the log buffer to Flash memory.
<b>logging saveolog</b>	Saves the contents of the log buffer to Flash memory.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.

# logging flash-minimum-free

To specify the minimum amount of free Flash memory that must exist before the security appliance saves a new log file, use the **logging flash-minimum-free** command in global configuration mode. This command affects how much free Flash memory must exist before the security appliance saves log files created by the **logging saveolog** and **logging flash-bufferwrap** commands. To reset the minimum required amount of free Flash memory to its default size of 3 MB, use the **no** form of this command.

**logging flash-minimum-free** *kbytes*

**no logging flash-minimum-free** *kbytes*

## Syntax Description

*kbytes* The minimum amount of Flash memory, in kilobytes, that must be available before the security appliance saves a new log file.

## Defaults

The default minimum free Flash memory is 3 MB.

## Command Modes

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

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

## Command History

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

## Usage Guidelines

The logging flash-minimum-free command specifies how much Flash memory the **logging saveolog** and **logging flash-bufferwrap** commands must preserve at all times.

If a log file to be saved by **logging saveolog** or **logging flash-bufferwrap** would cause the amount of free Flash memory to fall below the limit specified by the **logging flash-minimum-free** command, the security appliance deletes the oldest log files to ensure that the minimum amount of memory remains free after saving the new log file. If there are no files to delete or if, after all old files are deleted, free memory would still be below the limit, the security appliance fails to save the new log file.

## Examples

This example shows how to enable logging, enable the log buffer, enable the security appliance to write the log buffer to Flash memory, and specify that the minimum amount of free Flash memory must be 4000 KB:

```
hostname(config)# logging enable
hostname(config)# logging buffered
hostname(config)# logging flash-bufferwrap
hostname(config)# logging flash-minimum-free 4000
```

```
hostname(config)#
```

**Related Commands**

Command	Description
<b>clear logging buffer</b>	Clears the log buffer of all system log messages it contains.
<b>logging buffered</b>	Enables logging to the log buffer.
<b>logging enable</b>	Enables logging.
<b>logging flash-bufferwrap</b>	Writes the log buffer to Flash memory when the log buffer is full.
<b>logging flash-maximum-allocation</b>	Specifies the maximum amount of Flash memory that can be used for writing log buffer contents.
<b>logging saveolog</b>	Saves the contents of the log buffer to Flash memory.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.

# logging from-address

To specify the sender email address for system log messages emailed by the security appliance, use the **logging from-address** command in global configuration mode. All emailed system log messages appear to come from the address you specify. To remove the sender email address, use the **no** form of this command.

**logging from-address** *from-email-address*

**no logging from-address** *from-email-address*

## Syntax Description

*from-email-address* Source email address, that is, the email address that syslog emails appear to come from. For example, cdb@example.com.

## Defaults

No default behavior or values.

## Command Modes

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

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

## Command History

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

## Usage Guidelines

Sending system log messages by email is enabled by the **logging mail** command. The address specified with this command need not correspond to an existing email account.

## Examples

To enable logging and set up the security appliance to send system log messages by email, using the following criteria:

- Send messages that are critical, alerts, or emergencies.
- Send messages using ciscosecurityappliance@example.com as the sender's address.
- Send messages to admin@example.com
- Send messages using SMTP the primary servers pri-smtp-host and secondary server sec-smtp-host.

you would enter the following commands:

```
hostname(config)# logging enable
hostname(config)# logging mail critical
hostname(config)# logging from-address ciscosecurityappliance@example.com
```

```
hostname(config)# logging recipient-address admin@example.com
hostname(config)# smtp-server pri-smtp-host sec-smtp-host
```

**Related Commands**

Command	Description
<b>logging enable</b>	Enables logging.
<b>logging mail</b>	Enables the security appliance to send system log messages by email and determines which messages are sent by email.
<b>logging recipient-address</b>	Specifies the email address to which emailed system log messages are sent.
<b>smtp-server</b>	Configures an SMTP server.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.



# logging ftp-bufferwrap

To enable the security appliance to send the log buffer to an FTP server every time the buffer is full of messages that have never been saved, use the **logging ftp-bufferwrap** command in global configuration mode. To disable sending the log buffer to an FTP server, use the **no** form of this command.

**logging ftp-bufferwrap**

**no logging ftp-bufferwrap**

## Syntax Description

This command has no arguments or keywords.

## Defaults

The defaults are as follows:

- Logging to the buffer is disabled.
- Sending the log buffer to an FTP server is disabled.

## Command Modes

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

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

## Command History

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

## Usage Guidelines

When you enable **logging ftp-bufferwrap**, the security appliance sends log buffer data to the FTP server you specify with the **logging ftp-server** command. While the security appliance sends log data to the FTP server, it continues storing to the log buffer continues any new event messages.

For the security appliance to send log buffer contents to an FTP server, you must enable logging to the buffer; otherwise, the log buffer never has data to be written to Flash memory. To enable logging to the buffer, use the **logging buffered** command.

The security appliance creates log files with names that use a default time-stamp format, as follows:

`LOG-YYYY-MM-DD-HHMMSS.TXT`

where *YYYY* is the year, *MM* is the month, *DD* is the day of the month, and *HHMMSS* is the time in hours, minutes, and seconds.

### Examples

This example shows how enable logging, enable the log buffer, specify an FTP server, and enable the security appliance to write the log buffer to an FTP server. This example specifies an FTP server whose host name is logserver-352. The server can be accessed with the username logsupervisor and password 1luvMy10gs. Log files are to be stored in the /syslogs directory.

```
hostname(config)# logging enable
hostname(config)# logging buffered
hostname(config)# logging ftp-server logserver-352 /syslogs logsupervisor 1luvMy10gs
hostname(config)# logging ftp-bufferwrap
hostname(config)#
```

### Related Commands

Command	Description
<b>clear logging buffer</b>	Clears the log buffer of all system log messages it contains.
<b>logging buffered</b>	Enables logging to the log buffer.
<b>logging buffer-size</b>	Specifies log buffer size.
<b>logging enable</b>	Enables logging.
<b>logging ftp-server</b>	Specifies FTP server parameters for use with the <b>logging ftp-bufferwrap</b> command.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.

# logging ftp-server

To specify details about the FTP server the security appliance sends log buffer data to when **logging ftp-bufferwrap** is enabled, use the **logging ftp-server** command in global configuration mode. To remove all details about an FTP server, use the **no** form of this command.

**logging ftp-server** *ftp-server ftp\_server path username password*

**no logging ftp-server** *ftp-server ftp\_server path username password*

## Syntax Description

<i>ftp-server</i>	External FTP server IP address or host name.  <b>Note</b> If you specify a host name, be sure DNS is operating correctly on your network.
<i>path</i>	Directory path on the FTP server where the log buffer data is to be saved. This path is relative to the FTP root directory. For example:  /security_appliances/syslogs/appliance107
<i>username</i>	A username that is valid for logging into the FTP server.
<i>password</i>	The password for the username specified.

## Defaults

No FTP server is specified 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	•	•	•	•	—

## Command History

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

## Usage Guidelines

You can only specify one FTP server. If a logging FTP server is already specified, using the **logging ftp-server** command replaces that FTP server configuration with the new one you enter.

The security appliance does not verify the FTP server information you specify. If you misconfigure any of the details, the security appliance fails to send log buffer data to the FTP server.

## Examples

This example shows how enable logging, enable the log buffer, specify an FTP server, and enable the security appliance to write the log buffer to an FTP server. This example specifies an FTP server whose host name is logserver-352. The server can be accessed with the username logsupervisor and password 1luvMy10gs. Log files are to be stored in the /syslogs directory.

```
hostname(config)# logging enable
hostname(config)# logging buffered
hostname(config)# logging ftp-server logserver-352 /syslogs logsupervisor 1luvMy10gs
hostname(config)# logging ftp-bufferwrap
hostname(config)#
```

**Related Commands**

Command	Description
<b>clear logging buffer</b>	Clears the log buffer of all system log messages it contains.
<b>logging buffered</b>	Enables logging to the log buffer.
<b>logging buffer-size</b>	Specifies log buffer size.
<b>logging enable</b>	Enables logging.
<b>logging ftp-bufferwrap</b>	Sends the log buffer to an FTP server when the log buffer is full.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.

# logging history

To enable SNMP logging and specify which messages are to be sent to SNMP servers, use the **logging history** command in global configuration mode. To disable SNMP logging, use the **no** form of this command.

**logging history** [*logging\_list* | *level*]

**no logging history**

## Syntax Description

<i>level</i>	Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows: <ul style="list-style-type: none"> <li>• <b>0</b> or <b>emergencies</b>—System unusable.</li> <li>• <b>1</b> or <b>alerts</b>—Take immediate action.</li> <li>• <b>2</b> or <b>critical</b>—Critical condition.</li> <li>• <b>3</b> or <b>errors</b>—Error.</li> <li>• <b>4</b> or <b>warnings</b>—Warning.</li> <li>• <b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li>• <b>6</b> or <b>informational</b>—Information.</li> <li>• <b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul>
<i>logging_list</i>	Specifies the list that identifies the messages to send to the SNMP server. For information about creating lists, see the <b>logging list</b> command.

## Defaults

The security appliance does not log to SNMP servers 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	•	•	•	•	—

## Command History

Release	Modification
Preexisting	This command was preexisting.

## Usage Guidelines

The **logging history** command allows you to enable logging to an SNMP server and to set the SNMP message level or event list.

Examples

This example shows how to enable SNMP logging and specify that messages of levels 0, 1, 2, and 3 are sent to the SNMP server configured:

```
hostname(config)# logging enable
hostname(config)# snmp-server host infrastructure 10.2.3.7 trap community gam327
hostname(config)# snmp-server enable traps syslog
hostname(config)# logging history errors
hostname(config)#
```

Related Commands

Command	Description
logging enable	Enables logging.
logging list	Creates a reusable list of message selection criteria.
show logging	Displays the enabled logging options.
show running-config logging	Displays the logging-related portion of the running configuration.
snmp-server	Specifies SNMP server details.

# logging host

To define a syslog server, use the **logging host** command in global configuration mode. To remove a syslog server definition, use the **no** form of this command.

**logging host** *interface\_name* *syslog\_ip* [**tcp**/*port* | **udp**/*port*] [**format emblem**]

**logging host** *interface\_name* *syslog\_ip*

## Syntax Description

<b>format emblem</b>	(Optional) Enables EMBLEM format logging for the syslog server.
<i>interface_name</i>	Interface on which the syslog server resides.
<i>syslog_ip</i>	The IP address of the syslog server.
<b>tcp</b>	Specifies that the security appliance should use TCP to send messages to the syslog server.
<b>udp</b>	Specifies that the security appliance should use TCP to send messages to the syslog server.
<i>port</i>	The port that the syslog server listens to for messages. Valid port values are 1025 through 65535, for either protocol.

## Defaults

The defaults are as follows:

- The default port numbers are as follows:
  - UDP port is 514
  - TCP port is 1470
- The default protocol is UDP.

## Command Modes

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

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

## Command History

Release	Modification
Preexisting	This command was preexisting.

## Usage Guidelines

The **logging host ip\_address format emblem** command allows you to enable EMBLEM-format logging for each syslog server. EMBLEM-format logging is available for UDP system log messages only. If you enable EMBLEM-format logging for a particular syslog host, then the messages are sent to that host. If you also enable the **logging timestamp** keyword, the messages with a time stamp are sent.

You can use multiple **logging host** commands to specify additional servers that would all receive the system log messages. However, a server can only be specified to receive either UDP or TCP, not both.

You can display only the *port* and *protocol* values that you previously entered by using the **show running-config logging** command and finding the command in the listing—the TCP protocol is listed as 6 and the UDP protocol is listed as 17. TCP ports work only with the security appliance syslog server. The *port* must be the same port on which the syslog server listens.

Examples

This example shows how to send system log messages of levels 0, 1, 2, and 3 to a syslog server that resides on the inside interface and uses the default protocol and port number.

```
hostname(config)# logging enable
hostname(config)# logging host inside 10.2.2.3
hostname(config)# logging trap errors
hostname(config)#
```

Related Commands

Command	Description
<b>logging enable</b>	Enables logging.
<b>logging trap</b>	Enables logging to syslog servers.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.



# logging list

To create a logging list to use in other commands to specify messages by various criteria (logging level, event class, and message IDs) use the **logging list** command in global configuration mode. To remove the list, use the **no** form of this command.

**logging list** *name* {**level** *level* [**class** *event\_class*] | **message** *start\_id*[-*end\_id*]}

**no logging list** *name*

## Syntax Description

<b>class</b> <i>event_class</i>	(Optional) Sets the class of events for system log messages. For the level specified, only system log messages of the class specified are identified by the command. See “ <a href="#">Usage Guidelines</a> ” for a list of classes.
<b>level</b> <i>level</i>	Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows: <ul style="list-style-type: none"> <li>• <b>0</b> or <b>emergencies</b>—System unusable.</li> <li>• <b>1</b> or <b>alerts</b>—Take immediate action.</li> <li>• <b>2</b> or <b>critical</b>—Critical condition.</li> <li>• <b>3</b> or <b>errors</b>—Error.</li> <li>• <b>4</b> or <b>warnings</b>—Warning.</li> <li>• <b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li>• <b>6</b> or <b>informational</b>—Information.</li> <li>• <b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul>
<b>message</b> <i>start_id</i> [- <i>end_id</i> ]	Specified a message ID or range of IDs. To lookup the default level of a message, use the <b>show logging</b> command or see the <i>Cisco Security Appliance System Log Messages</i> guide.
<i>name</i>	Sets the logging list name.

## 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		
				Multiple	
Command Mode	Routed	Transparent	Single	Context	System
Global configuration	•	•	•	•	•

## Command History

Release	Modification
7.0(1)(1)	Support for this command was introduced.

---

**Usage Guidelines**

Logging commands that can use lists are the following:

- **logging asdm**
- **logging buffered**
- **logging console**
- **logging history**
- **logging mail**
- **logging monitor**
- **logging trap**

Possible values for the *event\_class* include the following:

- **auth**—User authentication
- **bridge**—Transparent firewall
- **ca**—PKI certificate authority
- **config**—Command interface
- **email**—Email proxy
- **ha**—Failover
- **ids**—Intrusion detection system
- **ip**—IP stack
- **np**—Network processor
- **ospf**—OSPF routing
- **rip**—RIP routing
- **session**—User session
- **snmp**—SNMP
- **sys**—System
- **vpn**—IKE and IPsec
- **vpnc**—VPN client
- **vpnfo**—VPN failover
- **vpnlb**—VPN load balancing

---

**Examples**

This example shows how to use the logging list command:

```
hostname(config)# logging list my-list 100100-100110
hostname(config)# logging list my-list level critical
hostname(config)# logging list my-list level warning class vpn
hostname(config)# logging buffered my-list
```

The preceding example states that system log messages that match the criteria specified will be sent to the logging buffer. The criteria specified in this example are:

4. System log message IDs that fall in the range of 100100 to 100110
5. All system Log messages with critical level or higher (emergency, alert, or critical)

6. All VPN class system Log messages with warning level or higher (emergency, alert, critical, error, or warning)

If a system log message satisfies any one of these conditions, it is logged to the buffer.

**Note**

When you design list criteria, criteria can specify overlapping sets of messages. System log messages matching more than one criteria are logged normally.

**Related Commands**

Command	Description
<b>logging enable</b>	Enables logging.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.

# logging mail

To enable the security appliance to send system log messages by email and to determine which messages are sent by email, use the **logging mail** command in global configuration mode. To disable emailing system log messages, use the **no** form of this command.

```
logging mail [logging_list | level]

no logging mail [logging_list | level]
```

## Syntax Description

<i>level</i>	<p>Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows:</p> <ul style="list-style-type: none"> <li>• <b>0</b> or <b>emergencies</b>—System unusable.</li> <li>• <b>1</b> or <b>alerts</b>—Take immediate action.</li> <li>• <b>2</b> or <b>critical</b>—Critical condition.</li> <li>• <b>3</b> or <b>errors</b>—Error.</li> <li>• <b>4</b> or <b>warnings</b>—Warning.</li> <li>• <b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li>• <b>6</b> or <b>informational</b>—Information.</li> <li>• <b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul>
<i>logging_list</i>	<p>Specifies the list that identifies the messages to send to the email recipient. For information about creating lists, see the <b>logging list</b> command.</p>

## Defaults

Logging to email 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	•	•	•	•	—

## Command History

Release	Modification
Preexisting	This command was preexisting.

## Usage Guidelines

Emailed system log messages appear in the subject line of the emails sent.

## Examples

To set up the security appliance to send system log messages by email, using the following criteria:

- Send messages that are critical, alerts, or emergencies.
- Send messages using ciscosecurityappliance@example.com as the sender's address.
- Send messages to admin@example.com
- Send messages using SMTP the primary servers pri-smtp-host and secondary server sec-smtp-host.

you would enter the following commands:

```
hostname(config)# logging mail critical
hostname(config)# logging from-address ciscosecurityappliance@example.com
hostname(config)# logging recipient-address admin@example.com
hostname(config)# smtp-server pri-smtp-host sec-smtp-host
```

## Related Commands

Command	Description
<b>logging enable</b>	Enables logging.
<b>logging from-address</b>	Specifies the email address from which emailed system log messages appear to come.
<b>logging list</b>	Creates a reusable list of message selection criteria.
<b>logging recipient-address</b>	Specifies the email address to which emailed system log messages are sent.
<b>smtp-server</b>	Configures an SMTP server.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.

# logging message

To specify the logging level of a system log message, use the **logging message** command with the **level** keyword in global configuration mode. To reset the logging level of a message to its default level, use the **no** form of this command. To prevent the security appliance from generating a particular system log message, use the **no** form of the **logging message** command (without the **level** keyword) in global configuration mode. To let the security appliance generate a particular system log message, use the **logging message** command (without the **level** keyword). These two purposes of the **logging message** command can be used in parallel. See the “Examples” section that follows.

```
logging message syslog_id level level
no logging message syslog_id level level
logging message syslog_id
no logging message syslog_id
```

Syntax Description	<div> <div>level level</div> <div>Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows: <ul style="list-style-type: none"> <li>0 or emergencies—System unusable.</li> <li>1 or alerts—Take immediate action.</li> <li>2 or critical—Critical condition.</li> <li>3 or errors—Error.</li> <li>4 or warnings—Warning.</li> <li>5 or notifications—Normal but significant condition.</li> <li>6 or informational—Information.</li> <li>7 or debugging—Debug messages, log FTP commands, and WWW URLs.</li> </ul> </div> </div>
	<div> <div>syslog_id</div> <div>The ID of the system log message that you want to enable or disable or whose severity level you want to modify. To lookup the default level of a message, use the <b>show logging</b> command or see the <i>Cisco Security Appliance System Log Messages</i> guide.</div> </div>

**Defaults** By default, all system log messages are enabled and the severity levels of all messages are set to their default levels.

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

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

**Command History**

Release	Modification
Preexisting	This command was preexisting.

**Usage Guidelines**

You can use the **logging message** command for two purposes:

- To control whether a message is enabled or disabled.
- To control the severity level of a message.

You can use the **show logging** command to determine the level currently assigned to a message and whether the message is enabled.

**Examples**

The series of commands in the following example illustrates the use of the **logging message** command to control both whether a message is enabled and the severity level of the messages

```
hostname(config)# show logging message 403503
syslog 403503: default-level errors (enabled)

hostname(config)# logging message 403503 level 1
hostname(config)# show logging message 403503
syslog 403503: default-level errors, current-level alerts (enabled)

hostname(config)# no logging message 403503
hostname(config)# show logging message 403503
syslog 403503: default-level errors, current-level alerts (disabled)

hostname(config)# logging message 403503
hostname(config)# show logging message 403503
syslog 403503: default-level errors, current-level alerts (enabled)

hostname(config)# no logging message 403503 level 3
hostname(config)# show logging message 403503
syslog 403503: default-level errors (enabled)
```

**Related Commands**

Command	Description
<b>clear configure logging</b>	Clears all logging configuration or message configuration only.
<b>logging enable</b>	Enables logging.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.

# logging monitor

To enable the security appliance to display system log messages in SSH and Telnet sessions, use the **logging monitor** command in global configuration mode. To disable the display of system log messages in SSH and Telnet sessions, use the **no** form of this command.

**logging monitor** [*logging\_list* | *level*]

**no logging monitor**

<b>Syntax Description</b>	<div data-bbox="345 577 1482 1087"> <div data-bbox="345 577 597 611"><i>level</i></div> <div data-bbox="605 577 1482 1087"> <p>Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows:</p> <ul style="list-style-type: none"> <li>• <b>0</b> or <b>emergencies</b>—System unusable.</li> <li>• <b>1</b> or <b>alerts</b>—Take immediate action.</li> <li>• <b>2</b> or <b>critical</b>—Critical condition.</li> <li>• <b>3</b> or <b>errors</b>—Error.</li> <li>• <b>4</b> or <b>warnings</b>—Warning.</li> <li>• <b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li>• <b>6</b> or <b>informational</b>—Information.</li> <li>• <b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul> </div> </div> <div data-bbox="345 1098 1482 1173"> <div data-bbox="345 1098 597 1131"><i>logging_list</i></div> <div data-bbox="605 1098 1482 1173"> <p>Specifies the list that identifies the messages to send to the SSH or Telnet session. For information about creating lists, see the <b>logging list</b> command.</p> </div> </div>
---------------------------	--

**Defaults** The security appliance does not display system log messages in SSH and Telnet sessions by default.

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

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

<b>Command History</b>	<b>Release</b>	<b>Modification</b>
	Preexisting	This command was preexisting.



**Usage Guidelines**

The **logging monitor** command enables system log messages for all sessions in the current context; however, in each session, the **terminal** command controls whether system log messages appear in that session.

**Examples**

This example shows how to enable the display of system log messages in console sessions. The use of the **errors** keyword indicates that messages of levels 0, 1, 2, and 3 should be shown in SSH and Telnet sessions. The **terminal** command enables the messages to appear in the current session.

```
hostname(config)# logging enable
hostname(config)# logging monitor errors
hostname(config)# terminal monitor
hostname(config)#
```

**Related Commands**

Command	Description
<b>logging enable</b>	Enables logging.
<b>logging list</b>	Creates a reusable list of message selection criteria.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.
<b>terminal</b>	Sets terminal line parameters.

# logging permit-hostdown

To make the status of a TCP-based syslog server irrelevant to new user sessions, use the **logging permit-hostdown** command in global configuration mode. To cause the security appliance to deny new user sessions when a TCP-based syslog server is unavailable, use the **no** form of this command.

**logging permit-hostdown**

**no logging permit-hostdown**

## Syntax Description

This command has no arguments or keywords.

## Defaults

By default, if you have enabled logging to a syslog server that uses a TCP connection, the security appliance does not allow new network access sessions when the syslog server is unavailable for any reason.

## Command Modes

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

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

## Command History

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

## Usage Guidelines

If you are using TCP as the logging transport protocol for sending messages to a syslog server, the security appliance denies new network access sessions as a security measure if the security appliance is unable to reach the syslog server. You can use the **logging permit-hostdown** command to remove this restriction.

## Examples

The following example makes the status of TCP-based syslog servers irrelevant to whether the security appliance permits new sessions. When the show running-config logging command includes in its output the show running-config logging command, the status of TCP-based syslog servers is irrelevant to new network access sessions.

```
hostname(config)# logging permit-hostdown
hostname(config)# show running-config logging
logging enable
logging trap errors
logging host infrastructure 10.1.2.3 6/1470
logging permit-hostdown
hostname(config)#
```

**Related Commands**

Command	Description
<b>logging enable</b>	Enables logging.
<b>logging host</b>	Defines a syslog server.
<b>logging trap</b>	Enables logging to syslog servers.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.

# logging queue

To specify how many system log messages the security appliance may hold in its syslog queue prior to processing them according to logging configuration, use the **logging queue** command in global configuration mode. To reset the logging queue size to the default of 512 messages, use the **no** form of this command.

**logging queue** *queue\_size*

**no logging queue** *queue\_size*

## Syntax Description

<i>queue_size</i>	The number of system log messages permitted in the queue used for storing system log messages prior to processing them. Valid values are from 0 to 8192 messages. Zero means that the queue is limited only by block memory availability.
-------------------	---

## Defaults

The default queue size is 512 messages.

## 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
Global configuration	•	•	•	•	•

## Command History

Release	Modification
Preexisting	This command was preexisting.

## Usage Guidelines

When traffic is so heavy that the queue fills up, the security appliance may discard messages.

## Examples

This example shows how to display the output of the **logging queue** and **show logging queue** commands:

```
hostname(config)# logging queue 0
hostname(config)# show logging queue
Logging Queue length limit : Unlimited
Current 5 msg on queue, 3513 msgs most on queue, 1 msg discard.
```

In this example, the **logging queue** command is set to 0, which means that the queue can hold as many messages as block memory availability allows. The system log messages in the queue are processed by the security appliance in the manner dictated by logging configuration, such as sending system log messages to mail recipients, saving them to Flash memory, and so forth.

The output of this example **show logging queue** command shows that 5 messages are queued, 3513 messages was the largest number of messages in the queue at one time since the security appliance was last booted, and that 1 message was discarded. Even though the queue was set for unlimited, the messages was discarded because no block memory was available to add the message to the queue.

**Related Commands**

Command	Description
<b>logging enable</b>	Enables logging.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.

# logging rate-limit

To limit the rate at which system log messages are generated, use the **logging rate-limit** command. To disable rate limiting, use the **no** form of this command.

**logging rate-limit** { **unlimited** | { *num* [*interval*] } } **message** *syslog\_id* | **level** *severity\_level*

[**no**] **logging rate-limit** [**unlimited** | { *num* [*interval*] } } **message** *syslog\_id* ] **level** *severity\_level*

## Syntax Description

<b>unlimited</b>	Disables rate limiting. This means that there is no limit on the logging rate.
<i>num</i>	Number of system messages that can be generated during the specified time interval. The valid range of values for <i>num</i> is 0 through 2147483647.
<i>interval</i>	(Optional) Time interval (in seconds) to use for measuring the rate at which messages are generated. The valid range of values for <i>interval</i> is 0 through 2147483647.
<b>message</b>	Suppresses reporting of this system log message.
<i>syslog_id</i>	ID of the system log message to be suppressed. The valid range of values for <i>syslog_id</i> is 100000-999999.
<b>level</b> <i>severity_level</i>	Sets the severity level above which the security appliance suppresses messages. The valid range for <i>severity_level</i> is 1 through 7.

## Defaults

The default setting for *interval* is 1.

## 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(4)	This command was introduced.

## Usage Guidelines

The system message severity levels are as follows:

- 0—System Unusable
- 1—Take Immediate Action
- 2—Critical Condition
- 3—Error Message
- 4—Warning Message

- 5—Normal but significant condition
- 6—Informational
- 7—Debug Message

### Examples

The following example shows how to limit the rate of system log message generation:

```
hostname(config)# logging rate-limit 5 message 106023
hostname(config)# logging rate-limit 10 60 level 7
```

### Related Commands

Command	Description
<b>clear running-config logging rate-limit</b>	Resets the logging rate-limit setting to its default.
<b>show logging</b>	Shows the messages currently in the internal buffer or to shows logging configuration settings
<b>show running-config logging rate-limit</b>	Shows the current logging rate-limit setting.

# logging recipient-address

To specify the receiving email address for system log messages emailed by the security appliance, use the **logging recipient-address** command in global configuration mode. To remove the receiving email address, use the **no** form of this command. You can configure up to 5 recipient addresses. If you want, each recipient address can have a different message level than that specified by the **logging mail** command.

**logging recipient-address** *address* [**level** *level*]

**no logging recipient-address** *address* [**level** *level*]

Syntax Description	<i>address</i>	Specifies recipient email address when sending system log messages by email.
	<b>level</b>	Indicates that a logging level follows.
	<i>level</i>	Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows: <ul style="list-style-type: none"> <li>• <b>0</b> or <b>emergencies</b>—System unusable.</li> <li>• <b>1</b> or <b>alerts</b>—Take immediate action.</li> <li>• <b>2</b> or <b>critical</b>—Critical condition.</li> <li>• <b>3</b> or <b>errors</b>—Error.</li> <li>• <b>4</b> or <b>warnings</b>—Warning.</li> <li>• <b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li>• <b>6</b> or <b>informational</b>—Information.</li> <li>• <b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul>
	<b>Note</b>	We do not recommend using a level greater than 3 with the <b>logging recipient-address</b> command. Higher logging levels are likely to cause dropped system log messages due to buffer overflow.

The message level specified by a **logging recipient-address** command overrides the message level specified by the **logging mail** command. For example, if a **logging recipient-address** command specifies a level of 7 but the **logging mail** command specifies a level of 3, the security appliance sends all messages to the recipient, including those of levels 4, 5, 6, and 7.

**Defaults** No default behavior or values.

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



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

#### Command History

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

#### Usage Guidelines

Sending system log messages by email is enabled by the **logging mail** command.

You can configure up to 5 **logging recipient-address** commands. Each command can have a different logging level than the others. This is useful when you want more urgent messages to go to a larger number of recipients than less urgent messages are sent to.

#### Examples

To set up the security appliance to send system log messages by email, using the following criteria:

- Send messages that are critical, alerts, or emergencies.
- Send messages using ciscosecurityappliance@example.com as the sender's address.
- Send messages to admin@example.com
- Send messages using SMTP the primary servers pri-smtp-host and secondary server sec-smtp-host.

you would enter the following commands:

```
hostname(config)# logging mail critical
hostname(config)# logging from-address ciscosecurityappliance@example.com
hostname(config)# logging recipient-address admin@example.com
hostname(config)# smtp-server pri-smtp-host sec-smtp-host
```

#### Related Commands

Command	Description
<b>logging enable</b>	Enables logging.
<b>logging from-address</b>	Specifies the email address from which emailed system log messages appear to come.
<b>logging mail</b>	Enables the security appliance to send system log messages by email and determines which messages are sent by email.
<b>smtp-server</b>	Configures an SMTP server.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the currently running logging configuration.

# logging savelog

To save the log buffer to Flash memory, use the **logging savelog** command in privileged EXEC mode.

**logging savelog** [*savefile*]

<b>Syntax Description</b>	<i>savefile</i>	(Optional) Saved Flash memory file name. If you do not specify the file name, the security appliance, saves the file using a default time-stamp format, as follows:  <i>LOG-YYYY-MM-DD-HHMMSS.TXT</i>  where <i>YYYY</i> is the year, <i>MM</i> is the month, <i>DD</i> is the day of the month, and <i>HHMMSS</i> is the time in hours, minutes, and seconds.
---------------------------	-----------------	--

<b>Defaults</b>	<p>The defaults are as follows:</p> <ul style="list-style-type: none"> <li>• Buffer size is 4 KB.</li> <li>• Minimum free Flash memory is 3 MB.</li> <li>• Maximum Flash memory allocation for buffer logging is 1 MB.</li> <li>• The default log file name is described in the preceding table.</li> </ul>
-----------------	---

**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) (1)	This command was introduced.

**Usage Guidelines** Before you can save the log buffer to Flash memory, you must enable logging to the buffer; otherwise, the log buffer never has data to be saved to Flash memory. To enable logging to the buffer, use the **logging buffered** command.



**Note** The **logging savelog** command does not clear the buffer. To clear the buffer, use the **clear logging buffer** command.

**Examples** This example enables logging and the log buffer, exits global configuration mode, and saves the log buffer to Flash memory, using the file name latest-logfile.txt:

```
hostname(config)# logging enable
hostname(config)# logging buffered
hostname(config)# exit
hostname# logging savelog latest-logfile.txt
hostname#
```

**Related Commands**

Command	Description
<b>clear logging buffer</b>	Clears the log buffer of all system log messages it contains.
<b>copy</b>	Copies a file from one location to another, including to a TFTP or FTP server.
<b>delete</b>	Deletes a file from the disk partition, such as saved log files.
<b>logging buffered</b>	Enables logging to the log buffer.
<b>logging enable</b>	Enables logging.
<b>show logging</b>	Displays the enabled logging options.

# logging standby

To enable the failover standby security appliance to send the system log messages of this security appliance to logging destinations, use the **logging standby** command in global configuration mode. To disable syslog and SNMP logging, use the **no** form of this command.

**logging standby**

**no logging standby**

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

**Defaults** The **logging standby** 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	•	•	•	•	•

Command History	Release	Modification
	Preexisting	This command was preexisting.

**Usage Guidelines** You can enable **logging standby** to ensure that the system log messages of the failover standby security appliance stay synchronized if failover occurs.



**Note**

Using the **logging standby** command causes twice as much traffic on shared logging destinations, such as syslog servers, SNMP servers, and FTP servers.

**Examples** The following example enables the security appliance to send system log messages to the failover standby security appliance. The output of the **show logging** command reveals that this feature is enabled.

```
hostname(config)# logging standby
hostname(config)# show logging
Syslog logging: enabled
  Facility: 20
  Timestamp logging: disabled
  Standby logging: enabled
  Deny Conn when Queue Full: disabled
  Console logging: disabled
  Monitor logging: disabled
  Buffer logging: disabled
```

```
Trap logging: disabled
History logging: disabled
Device ID: 'inside' interface IP address "10.1.1.1"
Mail logging: disabled
ASDM logging: disabled
```

**Related Commands**

Command	Description
<b>failover</b>	Enables the failover feature.
<b>logging enable</b>	Enables logging.
<b>logging host</b>	Defines a syslog server.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.

# logging timestamp

To specify that system log messages should include the date and time that the messages was generated, use the **logging timestamp** command in global configuration mode. To remove the date and time from system log messages, use the **no** form of this command.

**logging timestamp**

**no logging timestamp**

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

**Defaults** The security appliance does not include the date and time in system log messages 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	•	•	•	•	—

Release	Modification
Preexisting	This command was preexisting.

**Usage Guidelines** The **logging timestamp** command makes the security appliance include a timestamp in all system log messages.

**Examples** The following example enables the inclusion of timestamp information in all system log messages:

```
hostname(config)# logging enable
hostname(config)# logging timestamp
hostname(config)#
```

Command	Description
<b>logging enable</b>	Enables logging.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.

# logging trap

To specify which system log messages the security appliance sends to a syslog server, use the **logging trap** command in global configuration mode. To remove this command from the configuration, use the **no** form of this command.

**logging trap** [*logging\_list* | *level*]

**no logging trap**

## Syntax Description

<i>level</i>	Sets the maximum level for system log messages. For example, if you set the level to 3, then the security appliance generates system log messages for level 3, 2, 1, and 0. You can specify either the number or the name, as follows: <ul style="list-style-type: none"> <li>• <b>0</b> or <b>emergencies</b>—System unusable.</li> <li>• <b>1</b> or <b>alerts</b>—Take immediate action.</li> <li>• <b>2</b> or <b>critical</b>—Critical condition.</li> <li>• <b>3</b> or <b>errors</b>—Error.</li> <li>• <b>4</b> or <b>warnings</b>—Warning.</li> <li>• <b>5</b> or <b>notifications</b>—Normal but significant condition.</li> <li>• <b>6</b> or <b>informational</b>—Information.</li> <li>• <b>7</b> or <b>debugging</b>—Debug messages, log FTP commands, and WWW URLs.</li> </ul>
<i>logging_list</i>	Specifies the list that identifies the messages to send to the syslog server. For information about creating lists, see the <b>logging list</b> command.

## Defaults

No default syslog trap is defined.

## Command Modes

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

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

## Command History

Release	Modification
Preexisting	This command was preexisting.

### Usage Guidelines

If you are using TCP as the logging transport protocol, the security appliance denies new network access sessions as a security measure if the security appliance is unable to reach the syslog server, if the syslog server is misconfigured, or if the disk is full.

UDP-based logging does not prevent the security appliance from passing traffic if the syslog server fails.

### Examples

This example shows how to send system log messages of levels 0, 1, 2, and 3 to a syslog server that resides on the inside interface and uses the default protocol and port number.

```
hostname(config)# logging enable
hostname(config)# logging host inside 10.2.2.3
hostname(config)# logging trap errors
hostname(config)#
```

### Related Commands

Command	Description
<b>logging enable</b>	Enables logging.
<b>logging host</b>	Defines a syslog server.
<b>logging list</b>	Creates a reusable list of message selection criteria.
<b>show logging</b>	Displays the enabled logging options.
<b>show running-config logging</b>	Displays the logging-related portion of the running configuration.



# login

To log into privileged EXEC mode using the local user database (see the `username` command) or to change user names, use the **login** command in user EXEC mode.

## login

### 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
User EXEC	•	•	•	•	—

### Command History

Release	Modification
Preexisting	This command was preexisting.

### Usage Guidelines

From user EXEC mode, you can log in to privileged EXEC mode as any username in the local database using the **login** command. The **login** command is similar to the **enable** command when you have enable authentication turned on (see the **aaa authentication console** command). Unlike enable authentication, the **login** command can only use the local username database, and authentication is always required with this command. You can also change users using the **login** command from any CLI mode.

To allow users to access privileged EXEC mode (and all commands) when they log in, set the user privilege level to 2 (the default) through 15. If you configure local command authorization, then the user can only enter commands assigned to that privilege level or lower. See the **aaa authorization command** for more information.



#### Caution

If you add users to the local database who can gain access to the CLI and whom you do not want to enter privileged EXEC mode, you should configure command authorization. Without command authorization, users can access privileged EXEC mode (and all commands) at the CLI using their own password if their privilege level is 2 or greater (2 is the default). Alternatively, you can use RADIUS or TACACS+ authentication, or you can set all local users to level 1 so you can control who can use the system enable password to access privileged EXEC mode.

### Examples

The following example shows the prompt after you enter the **login** command:

```
hostname> login
```

Username:

Related Commands	Command	Description
	aaa authorization command	Enables command authorization for CLI access.
	aaa authentication console	Requires authentication for console, Telnet, HTTP, SSH, or enable command access.
	logout	Logs out of the CLI.
	username	Adds a user to the local database.

# login-button

To customize the Login button of the WebVPN page login box that is displayed to WebVPN users when they connect to the security appliance, use the **login-button** command from webvpn customization mode:

**login-button** {text | style} *value*

[no] **login-button** {text | style} *value*

To remove the command from the configuration and cause the value to be inherited, use the **no** form of the command.

## Syntax Description

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

## Defaults

The default login button text is “Login”.

The default login button style is:

border: 1px solid black;background-color:white;font-weight:bold; font-size:80%

## Command Modes

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

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

## Command History

Release	Modification
7.1(1)	This command was introduced.

## Usage Guidelines

The **style** option is expressed as any valid Cascading Style Sheet (CSS) parameters. Describing these parameters is beyond the scope of this document. For more information about CSS parameters, consult CSS specifications at the World Wide Web Consortium (W3C) website at [www.w3.org](http://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](http://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**

The following example customizes the Login button with the text “OK”:

```
F1-asal(config)# webvpn
F1-asal(config-webvpn)# customization cisco
F1-asal(config-webvpn-custom)# login-button text OK
```

**Related Commands**

Command	Description
<b>login-title</b>	Customizes the title of the WebVPN page login box.
<b>group-prompt</b>	Customizes the group prompt of the WebVPN page login box.
<b>password-prompt</b>	Customizes the password prompt of the WebVPN page login box.
<b>username-prompt</b>	Customizes the username prompt of the WebVPN page login box.

# login-message

To customize the login message of the WebVPN page displayed to WebVPN users when they connect to the security appliance, use the **login-message** command from webvpn customization mode:

**login-message** {**text** | **style**} *value*

[**no**] **login-message** {**text** | **style**} *value*

To remove the command from the configuration and cause the value to be inherited, use the **no** form of the command.

## Syntax Description

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

## Defaults

The default login message is “Please enter your username and password”.

The default login message style is background-color:#CCCCCC;color:black.

## 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	•	—	•	—	—

## Command History

Release	Modification
7.1(1)	This command was introduced.

## Usage Guidelines

The **style** option is expressed as any valid Cascading Style Sheet (CSS) parameters. Describing these parameters is beyond the scope of this document. For more information about CSS parameters, consult CSS specifications at the World Wide Web Consortium (W3C) website at [www.w3.org](http://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](http://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 login message text is set to “username and password”:

```
F1-asal(config)# webvpn
F1-asal(config-webvpn)# customization cisco
F1-asal(config-webvpn-custom)# login-message text username and password
```

**Related Commands**

Command	Description
<b>login-title</b>	Customizes the title of the login box on the WebVPN page.
<b>username-prompt</b>	Customizes the username prompt of the WebVPN page login.
<b>password-prompt</b>	Customizes the password prompt of the WebVPN page login.
<b>group-prompt</b>	Customizes the group prompt of the WebVPN page login.

# login-title

To customize the title of the login box on the WebVPN page displayed to WebVPN users, use the **login-title** command from webvpn customization mode:

**login-title** {text | style} value

[no] **login-title** {text | style} value

To remove the command from the configuration and cause the value to be inherited, use the **no** form of the command.

## Syntax Description

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

## Defaults

The default login text is “Login”.

The default HTML style of the login title is background-color: #666666; color: white.

## 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	•	—	•	—	—

## Command History

Release	Modification
7.1(1)	This command was introduced.

## Usage Guidelines

The **style** option is expressed as any valid Cascading Style Sheet (CSS) parameters. Describing these parameters is beyond the scope of this document. For more information about CSS parameters, consult CSS specifications at the World Wide Web Consortium (W3C) website at [www.w3.org](http://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](http://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**

The following example configures the login title style:

```
F1-asal(config)# webvpn
F1-asal(config-webvpn)# customization cisco
F1-asal(config-webvpn-custom)# login-title style background-color: rgb(51,51,255);color:
rgb(51,51,255); font-family: Algerian; font-size: 12pt; font-style: italic; font-weight:
bold
```

**Related Commands**

Command	Description
<b>login-message</b>	Customizes the login message of the WebVPN login page.
<b>username-prompt</b>	Customizes the username prompt of the WebVPN login page.
<b>password-prompt</b>	Customizes the password prompt of the WebVPN login page.
<b>group-prompt</b>	Customizes the group prompt of the WebVPN login page.



# logo

To customize the logo on the WebVPN page displayed to WebVPN users when they connect to the security appliance, use the **logo** command from webvpn customization mode:

```
logo { none | file {path value} }
[no] logo { none | file {path value} }
```

## Syntax Description

<b>none</b>	Indicates that there is no logo. Sets a null value, thereby disallowing a logo. Prevents inheriting a logo.
<b>file</b>	Indicates you are supplying a file containing a logo.
<i>path</i>	The path of the filename. The possible paths are disk0:, disk1:, or flash:
<i>value</i>	Specifies the filename of the logo. Maximum length is 255 characters, with no spaces. File type must be JPG, PNG, or GIF, and must be less than 100 KB.

## Defaults

The default logo is the Cisco logo.

## 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	•	—	•	—	—

## Command History

Release	Modification
7.1(1)	This command was introduced.

## Usage Guidelines

To remove a logo from the configuration and reset the default (the Cisco logo), use the **no** form of this command.

To have no logo, use the **logo none** command.

If the filename you specify does not exist, an error message displays. If you remove a logo file but the configuration still points to it, no logo displays.

The filename cannot contain spaces.

## Examples

In the following example, the file cisco\_logo.gif contains a custom logo:

```
F1-asal(config)# webvpn
F1-asal(config-webvpn)# customization cisco
F1-asal(config-webvpn-custom)#logo file disk0:cisco_logo.gif
```

Related Commands

Command	Description
title	Customizes the title of the WebVPN page
page style	Customizes the WebVPN page using Cascading Style Sheet (CSS) parameters.

# logout

To exit from the CLI, use the **logout** command in user EXEC mode.

## logout

### Syntax Description

This command has no arguments or keywords.

### Defaults

No default behaviors or values.

### Command Modes

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

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

### Command History

Release	Modification
Preexisting	This command was preexisting.

### Usage Guidelines

The **logout** command lets you log out of the security appliance. You can use the **exit** or **quit** commands to go back to unprivileged mode.

### Examples

The following example shows how to log out of the security appliance:

```
hostname> logout
```

### Related Commands

Command	Description
<b>login</b>	Initiates the log-in prompt.
<b>exit</b>	Exits an access mode.
<b>quit</b>	Exits configuration or privileged mode.

# logout-message

To customize the logout message of the WebVPN logout screen that is displayed to WebVPN users when they logout from WebVPN service, use the **logout-message** command from webvpn customization mode:

**logout-message** {**text** | **style**} *value*

[**no**] **logout-message** {**text** | **style**} *value*

To remove the command from the configuration and cause the value to be inherited, use the **no** form of the command.

## Syntax Description

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

## Defaults

The default logout message text is “Goodbye”.

The default logout message style is background-color:#999999;color:black.

## 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	•	—	•	—	—

## Command History

Release	Modification
7.1(1)	This command was introduced.

## Usage Guidelines

The **style** option is expressed as any valid Cascading Style Sheet (CSS) parameters. Describing these parameters is beyond the scope of this document. For more information about CSS parameters, consult CSS specifications at the World Wide Web Consortium (W3C) website at [www.w3.org](http://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](http://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**

The following example configures the logout message style:

```
F1-asal(config)# webvpn
F1-asal(config-webvpn)# customization cisco
F1-asal(config-webvpn-custom)# logout-message style background-color:
rgb(51,51,255);color: rgb(51,51,255); font-family: Algerian; font-size: 12pt; font-style:
italic; font-weight: bold
```

**Related Commands**

Command	Description
<b>logout-title</b>	Customizes the logout title of the WebVPN page.
<b>group-prompt</b>	Customizes the group prompt of the WebVPN page login box.
<b>password-prompt</b>	Customizes the password prompt of the WebVPN page login box.
<b>username-prompt</b>	Customizes the username prompt of the WebVPN page login box.

