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Preface

The instructions in this book are designed for an experienced system administrator with knowledge of networking and email administration.

Before you Read this Book

Note

If you have already cabled your appliance to your network, ensure that the default IP address for the appliance does not conflict with other IP addresses on your network. The IP address assigned to the Management port by the factory is 192.168.42.42. See the “Setup and Installation” chapter in the user guide for your release for more information about assigning IP addresses to the appliance.
Typographic Conventions

<table>
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<tr>
<th>Typeface or Symbol</th>
<th>Meaning</th>
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<tr>
<td>AaBbCc123</td>
<td>The names of commands, files, and directories; on-screen computer output.</td>
<td>Please choose an IP interface for this Listener. The <code>sethostname</code> command sets the name of the appliance.</td>
</tr>
</tbody>
</table>
| AaBbCc123          | What you type, when contrasted with on-screen computer output. | `mail3.example.com> commit` Please enter some comments describing your changes: 
\[\] > Changed the system hostname |
| AaBbCc123          | Book titles, new words or terms, words to be emphasized. Command line variable; replace with a real name or value. | Read the *QuickStart Guide*. The appliance *must* be able to uniquely select an interface to send an outgoing packet. Before you begin, please reset your password to a new value. 
Old password: ironport
New password: your_new_password
Retype new password: your_new_password |

Additional Resources

Documentation

Documentation for your Email Security appliance is available from:


Knowledge Base

To access the Knowledge Base for information about Cisco Content Security products, visit:

http://www.cisco.com/web/ironport/knowledgebase.html

*Note* You need a Cisco.com User ID to access the site. If you do not have a Cisco.com User ID, see Registering for a Cisco Account, page 3.
Cisco Support Community

Cisco Support Community is an online forum for Cisco customers, partners, and employees. It provides a place to discuss general content security issues, as well as technical information about specific Cisco products. You can post topics to the forum to ask questions and share information with other users.

Access the Cisco Support Community for Email Security appliances at:

https://supportforums.cisco.com/community/netpro/security/email

Customer Support

Use the following methods to obtain support:
U.S.: Call 1 (408) 526-7209 or Toll-free 1 (800) 553-2447
If you purchased support through a reseller or another supplier, please contact that supplier directly with your product support issues.

Registering for a Cisco Account

Access to many resources on Cisco.com requires a Cisco account.
If you do not have a Cisco.com User ID, you can register for one here:

Cisco Welcomes Your Comments

The Technical Publications team is interested in improving the product documentation. Your comments and suggestions are always welcome. You can send comments to the following email address:
contentsecuritydocs@cisco.com
Please include the title of this book and the publication date from the title page in the subject line of your message.
CLI Quick Reference Guide

Use the tables to locate the appropriate CLI command, a brief description and its availability on the C-, X, and M-series platforms.

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Command Line Interface: The Basics

This chapter contains the following sections:

- Accessing the Command Line Interface (CLI), page 2-1
- Batch Commands, page 2-6

Accessing the Command Line Interface (CLI)

The Command Line Interface is accessible via SSH or Telnet on IP interfaces that have been configured with these services enabled, or via terminal emulation software on the serial port. By factory default, SSH and Telnet are configured on the Management port. Use the `interfaceconfig` command to disable these services.

Access to the CLI varies depending on the management connection method chosen while setting up the appliance. The factory default username and password are listed next. Initially, only the admin user account has access to the CLI. You can add other users with differing levels of permission after you have accessed the command line interface for the first time via the admin account. The system setup wizard asks you to change the password for the admin account. The password for the admin account can also be reset directly at any time using the `password` command.

To connect via Ethernet: Start an SSH or Telnet session with the factory default IP address 192.168.42.42. SSH is configured to use port 22. Telnet is configured to use port 23. Enter the username and password below.

To connect via a Serial connection: Start a terminal session with the communication port on your personal computer that the serial cable is connected to. See the “Setup and Installation” chapter for more information. Enter the username and password below.

Log in to the appliance by entering the username and password below.

**Factory Default Username and Password**

- Username: admin
- Password: ironport

For example:

```
login: admin
password: ironport
```
Command Line Interface Conventions

This section describes the rules and conventions of the AsyncOS CLI.

Command Prompt

The top-level command prompt consists of the fully qualified hostname, followed by the greater than (>) symbol, followed by a space. For example:

mail3.example.com>

If the appliance has been configured as part of a cluster with the Centralized Management feature, the prompt in the CLI changes to indicate the current mode. For example:

(Cluster Americas) >

or

(Machine los_angeles.example.com) >

See “Centralized Management” in the user guide for more information.

When running commands, the CLI requires input from you. When the CLI is expecting input from you, the command prompt shows the default input enclosed in square brackets ([ ]) followed by the greater than (>) symbol. When there is no default input, the command prompt brackets are empty.

For example:

Please create a fully-qualified hostname for this Gateway
(Ex: "mail3.example.com"): [ ]> mail3.example.com

When there is a default setting, the setting is displayed within the command prompt brackets. For example:

Ethernet interface:
  1. Data 1
  2. Data 2
  3. Management
[1]> 1

When a default setting is shown, typing Return is equivalent to typing the default:

Ethernet interface:
  1. Data 1
  2. Data 2
  3. Management
[1]> (type Return)
Command Syntax

When operating in the interactive mode, the CLI command syntax consists of single commands with no white spaces and no arguments or parameters. For example:

`mail3.example.com> systemsetup`

Select Lists

When you are presented with multiple choices for input, some commands use numbered lists. Enter the number of the selection at the prompt.

For example:

```
Log level:
1. Error
2. Warning
3. Information
4. Debug
5. Trace
[3]> 3
```

Yes/No Queries

When given a yes or no option, the question is posed with a default in brackets. You may answer Y, N, Yes, or No. Case is not significant.

For example:

```
Do you want to enable FTP on this interface? [Y]> n
```

Subcommands

Some commands give you the opportunity to use subcommands. Subcommands include directives such as NEW, EDIT, and DELETE. For the EDIT and DELETE functions, these commands provide a list of the records previously configured in the system.

For example:

`mail3.example.com> interfaceconfig`

```
Currently configured interfaces:
1. Management (192.168.42.42/24: mail3.example.com)

Choose the operation you want to perform:
- NEW - Create a new interface.
- EDIT - Modify an interface.
- GROUPS - Define interface groups.
- DELETE - Remove an interface.
[>]`

Within subcommands, typing Enter or Return at an empty prompt returns you to the main command.
Escape

You can use the Control-C keyboard shortcut at any time within a subcommand to immediately exit return to the top level of the CLI.

History

The CLI keeps a history of all commands you type during a session. Use the Up and Down arrow keys on your keyboard, or the Control-P and Control-N key combinations, to scroll through a running list of the recently-used commands.

```
mail3.example.com> (type the Up arrow key)

mail3.example.com> interfaceconfig (type the Up arrow key)

mail3.example.com> topin (type the Down arrow key)
```

Command Completion

The command-line interface supports command completion. You can type the first few letters of some commands followed by the Tab key, and the CLI completes the string for unique commands. If the letters you entered are not unique among commands, the CLI “narrows” the set. For example:

```
mail3.example.com> set (type the Tab key)
setgateway, sethostname, settime, settz
mail3.example.com> seth (typing the Tab again completes the entry with sethostname)
```

For both the history and file completion features of the CLI, you must type Enter or Return to invoke the command.

Configuration Changes

You can make configuration changes while email operations proceed normally.

Configuration changes will not take effect until you complete the following steps:

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Issue the commit command at the command prompt.</th>
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</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Give the commit command the input required.</td>
</tr>
<tr>
<td>Step 3</td>
<td>Receive confirmation of the commit procedure at the CLI.</td>
</tr>
</tbody>
</table>

Changes to configuration that have not been committed will be recorded but not put into effect until the commit command is run.
Chapter 2      Command Line Interface: The Basics

Accessing the Command Line Interface (CLI)

Note
Not all commands require the `commit` command to be run. See Chapter 1, “CLI Quick Reference Guide” for a summary of commands that require commit to be run before their changes take effect.

Exiting the CLI session, system shutdown, reboot, failure, or issuing the `clear` command clears changes that have not yet been committed.

General Purpose CLI Commands

This section describes the commands used to commit or clear changes, to get help, and to quit the command-line interface.

Committing Configuration Changes

The `commit` command is critical to saving configuration changes to the appliance. Many configuration changes are not effective until you enter the `commit` command. (A few commands do not require you to use the `commit` command for changes to take effect. The `commit` command applies configuration changes made since the last `commit` command or the last `clear` command was issued. You may include comments up to 255 characters. Changes are not verified as committed until you receive confirmation along with a timestamp.

Entering comments after the `commit` command is optional.

```
mail3.example.com> commit

Please enter some comments describing your changes:
[]> Changed "psinet" IP Interface to a different IP address
Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT
```

Note
To successfully commit changes, you must be at the top-level command prompt. Type Return at an empty prompt to move up one level in the command line hierarchy.

Clearing Configuration Changes

The `clear` command clears any configuration changes made since the last `commit` or `clear` command was issued.

```
mail3.example.com> clear

Are you sure you want to clear all changes since the last commit? [Y]> y
Changes cleared: Mon Jan 01 12:00:01 2003
mail3.example.com>
```
**Batch Commands**

AsyncOS includes support for batch command formats that allow you to execute certain CLI commands using a new, single-line CLI format. This format reduces the number of inputs required to complete tasks and provides a mechanism allowing you to easily automate common configuration tasks. Batch commands also allow you to issue commands remotely using an SSH client. This enables you to easily script CLI commands and execute them on multiple appliances at one time.

Not all commands have a batch equivalent, but all batch commands can be executed as non-batch commands.

Batch command syntax is dependent on the specific command being used. Please see the appropriate CLI example in Chapter 3, “The Commands: Reference Examples” for more information about syntax specific to that command.

**Batch Command Example**

In the following example, the sender group REDLIST is created. It is then associated with the policy THROTTLLED, and then the sender ‘possible_spammer.com’ is added to the sender group.

To execute this action using the CLI:

```
example.com> listenerconfig
```

Currently configured listeners:

1. IncomingMail (on Management, 192.168.42.4/24) SMTP TCP Port 25 Public
2. OutgoingMail (on Data 2, 192.168.40.42/24) SMTP TCP Port 25 Private
Choose the operation you want to perform:

- **NEW** - Create a new listener.
- **EDIT** - Modify a listener.
- **DELETE** - Remove a listener.
- **SETUP** - Change global settings.

>[] edit

Enter the name or number of the listener you wish to edit.

>[] IncomingMail

Choose the operation you want to perform:

- **NAME** - Change the name of the listener.
- **INTERFACE** - Change the interface.
- **LIMITS** - Change the injection limits.
- **SETUP** - Configure general options.
- **HOSTACCESS** - Modify the Host Access Table.
- **RCPTACCESS** - Modify the Recipient Access Table.
- **BOUNCECONFIG** - Choose the bounce profile to use for messages injected on this listener.

- **MASQUERADE** - Configure the Domain Masquerading Table.
- **DOMAINMAP** - Configure domain mappings.

>[] HOSTACCESS

There are currently 4 policies defined.

There are currently 5 sender groups.

Choose the operation you want to perform:

- **NEW** - Create a new entry.
- **EDIT** - Modify an entry.
- **DELETE** - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
- IMPORT - Import a table from a file.
- EXPORT - Export the table to a file.
- CLEAR - Remove all entries.

[1]> NEW

1. New Sender Group
2. New Policy

[1]> 1

Enter a name for this sender group. (optional)

[1]> REDLIST

Enter the hosts to add. CIDR addresses such as 10.1.1.0/24 are allowed.
IP address ranges such as 10.1.10-20 are allowed. IP subnets such as 10.2.3. are allowed.
Hostnames such as crm.example.com are allowed.
Partial hostnames such as .example.com are allowed.
Ranges of SenderBase Reputation scores such as SBRS[7.5:10.0] are allowed.
SenderBase Network Owner IDs such as SBO:12345 are allowed.
Remote blacklist queries such as dnslist[query.blacklist.example] are allowed.
Separate multiple hosts with commas

[1]> possible_spammer.com

Select a behavior for this entry.
1. Accept
2. Relay
3. Reject
To perform the same action using a CLI batch command:

example.com> listenerconfig edit IncomingMail hostaccess new sendergroup REDLIST possible_spammer.com Policy: "THROTTLED"
The Commands: Reference Examples

This chapter contains the following sections:

- Advanced Malware Protection, page 3-2
- Anti-Spam, page 3-6
- Graymail Detection and Safe Unsubscribing, page 3-13
- Anti-Virus, page 3-15
- Command Line Management, page 3-18
- Configuration File Management, page 3-21
- Cluster Management, page 3-26
- Data Loss Prevention, page 3-28
- S/MIME Security Services, page 3-31
- Domain Keys, page 3-33
- DMARC Verification, page 3-45
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- General Management/Administration/Troubleshooting, page 3-59
- Content Scanning, page 3-119
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- Logging and Alerts, page 3-226
- Reporting, page 3-243
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- SMTP Services Configuration, page 3-248
- System Setup, page 3-280
- URL Filtering, page 3-285
- User Management, page 3-290
- Virtual Appliance Management, page 3-295
How to Read the Listing

For each command, there is a description and at least one example of the command being used. The Usage section specifies the following command attributes:

<table>
<thead>
<tr>
<th>Step 1</th>
<th>Does the command require a commit command to be implemented on the appliance?</th>
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</thead>
<tbody>
<tr>
<td>Step 2</td>
<td>Is the command restricted to a particular mode (cluster, group, or machine)?</td>
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<tr>
<td>Step 3</td>
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</table>

For more information about Centralized Management, see User Guide for AsyncOS for Cisco Email Security Appliances.
For more information about batch formats, please see “Command Line Interface: The Basics” on page 1.

Advanced Malware Protection

**ampconfig**

Configure file reputation filtering and file analysis. Do not modify advanced options without guidance from Cisco TAC.

**Usage**

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command supports a batch format. For details, see the inline help by typing the command: `help ampconfig`.

**Examples**

- Enabling File Reputation and File Analysis, page 3-2
- Configure Email Security appliance to Use Public Cloud File Analysis Server, page 3-3
- (Public Cloud File Analysis Services Only) Configuring Appliance Groups, page 3-4
- Configure Email Security appliance to Use an On-Premises File Analysis Server, page 3-5
- Clearing Local File Reputation Cache, page 3-6

**Enabling File Reputation and File Analysis**

```
mail.example.com> ampconfig

File Reputation: Disabled

Choose the operation you want to perform:
```
- SETUP - Configure Advanced-Malware protection service.

[]> setup

File Reputation: Disabled
Would you like to use File Reputation? [Y]>

Would you like to use File Analysis? [Y]>

File types supported for File Analysis:

1. Microsoft Executables

Do you want to modify the file types selected for File Analysis? [N]>

Specify AMP processing timeout (in seconds)
[120]>

Advanced-Malware protection is now enabled on the system.
Please note: you must issue the 'policyconfig' command (CLI) or Mail Policies (GUI) to configure advanced malware scanning behavior for default and custom Incoming Mail Policies.
This is recommended for your DEFAULT policy.

File Reputation: Enabled
File Analysis: Enabled
File types selected for File Analysis:

1. Microsoft Executables

Choose the operation you want to perform:
- SETUP - Configure Advanced-Malware protection service.
- ADVANCED - Set values for AMP parameters (Advanced configuration).
- SETGROUP - Add this appliance to the group of appliances that can share File Analysis reporting details.
- CLEARCACHE - Clears the local File Reputation cache.

[]>

---

**Configure Email Security appliance to Use Public Cloud File Analysis Server**

mail.example.com> ampconfig

File Reputation: Enabled
File Analysis: Enabled
File types selected for File Analysis:

  Microsoft Windows / DOS Executable

Appliance Group ID/Name: Not part of any group yet

Choose the operation you want to perform:
- SETUP - Configure Advanced-Malware protection service.
- **ADVANCED** - Set values for AMP parameters (Advanced configuration).
- **SETGROUP** - Add this appliance to the group of appliances that can share File Analysis reporting details.
- **CLEARCACHE** - Clears the local File Reputation cache.

[]]> advanced

Enter cloud query timeout?
[15]>

Enter cloud domain?
[cloud-domain.com]>

Enter reputation cloud server pool?
[cloud-server-pool.com]>

Do you want use the recommended reputation threshold from cloud service? [Y]>

Choose a file analysis server:
1. AMERICAS (https://americas-fa.com)
2. Private Cloud
[1]>

...(Public Cloud File Analysis Services Only) Configuring Appliance Groups

In order to allow all content security appliances in your organization to view file analysis result details in the cloud for files sent for analysis from any appliance in your organization, you need to join all appliances to the same appliance group.

For more information, see the “File Reputation Filtering and File Analysis” chapter in the user guide.

mail.example.com> ampconfig

File Reputation: Enabled
File Analysis: Enabled
File types selected for File Analysis:
  Microsoft Windows / DOS Executable
Appliance Group ID/Name: Not part of any group yet

Choose the operation you want to perform:
- **SETUP** - Configure Advanced-Malware protection service.
- **ADVANCED** - Set values for AMP parameters (Advanced configuration).
- **SETGROUP** - Add this appliance to the group of appliances that can share File Analysis reporting details.
- **CLEARCACHE** - Clears the local File Reputation cache.

[]]> setgroup

Does your organization have multiple Cisco Email, Web, and/or Content Security Management appliances? [N]> Y

Do you want this appliance to display detailed analysis reports for files uploaded to the cloud from other appliances in your organization, and vice-versa? [Y]>

Enter an Analysis Group name. This name is case-sensitive and must be configured identically on each appliance in the Analysis Group.
[FA_Reporting]

Registration is successful with the group name. This does not require commit

File Reputation: Enabled
File Analysis: Enabled
File types selected for File Analysis:
  Microsoft Windows / DOS Executable
Appliance Group ID/Name: FA_Reporting

Choose the operation you want to perform:
- SETUP - Configure Advanced-Malware protection service.
- ADVANCED - Set values for AMP parameters (Advanced configuration).
- VIEWGROUP - view the group members details.
- CLEARCACHE - Clears the local File Reputation cache.

Note
After you configure an appliance group, you cannot use the setgroup subcommand. If you want to modify the group for any reason, you must open a case with Cisco TAC. You can view the details of the appliance group using the viewgroup subcommand.

Configure Email Security appliance to Use an On-Premises File Analysis Server

mail.example.com> ampconfig

File Reputation: Enabled
File Analysis: Enabled
File types selected for File Analysis:
    Microsoft Windows / DOS Executable

Choose the operation you want to perform:
- SETUP - Configure Advanced-Malware protection service.
- ADVANCED - Set values for AMP parameters (Advanced configuration).
- CLEARCACHE - Clears the local File Reputation cache.

[]> advanced

Enter cloud query timeout? [15]

Enter cloud domain? [a.immunet.com]

Enter reputation cloud server pool? [cloud-sa.amp.sourcefire.com]

Do you want use the recommended reputation threshold from cloud service? [Y]

Choose a file analysis server:
1. AMERICAS (https://panacea.threatgrid.com)
2. Private Cloud [1] 2

Enter file analysis server url? [https://mycloud.example.com]

Certificate Authority:
1. Use Cisco Trusted Root Certificate List
2. Paste certificate to CLI [1]

Enter heartbeat interval? [15]

Do you want to enable SSL communication (port 443) for file reputation? [N]

File Reputation: Enabled
File Analysis: Enabled
File types selected for File Analysis:
Microsoft Windows / DOS Executable

Choose the operation you want to perform:
- SETUP - Configure Advanced-Malware protection service.
- ADVANCED - Set values for AMP parameters (Advanced configuration).
- CLEARCACHE - Clears the local File Reputation cache.

Clearing Local File Reputation Cache

mail.example.com> ampconfig
File Reputation: Enabled
File Analysis: Enabled
File types selected for File Analysis:
  Microsoft Windows / DOS Executable

Choose the operation you want to perform:
- SETUP - Configure Advanced-Malware protection service.
- ADVANCED - Set values for AMP parameters (Advanced configuration).
- CLEARCACHE - Clears the local File Reputation cache.

Do you want to clear File Reputation Cache? [N]> y
Cache cleared successfully.
File Reputation: Enabled
File Analysis: Enabled
File types selected for File Analysis:
  Microsoft Windows / DOS Executable

Choose the operation you want to perform:
- SETUP - Configure Advanced-Malware protection service.
- ADVANCED - Set values for AMP parameters (Advanced configuration).
- CLEARCACHE - Clears the local File Reputation cache.

Anti-Spam

This section contains the following commands:

- antispamconfig
- antispamstatus
- antispamupdate
- incomingrelayconfig

antispamconfig

Description

Configure anti-spam policy.
Usage

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

Example

The following examples demonstrates the configuration for Anti-Spam functionality.

```
mail3.example.com> antispmconfig

Choose the operation you want to perform:
- IRONPORT - Configure IronPort Anti-Spam.
- CLOUDMARK - Configure Cloudmark Service Provider Edition.
- MULTISCAN - Configure IronPort Intelligent Multi-Scan.

[>]  ironport

IronPort Anti-Spam scanning: Disabled

Choose the operation you want to perform:
- SETUP - Edit IronPort Anti-Spam settings.

[>]  setup

IronPort Anti-Spam scanning: Disabled
Would you like to use IronPort Anti-Spam scanning? [Y]> y

The IronPort Anti-Spam License Agreement is displayed (if you have not already accepted it).

Do you accept the above IronPort Anti-Spam license agreement? []> Y

Increasing the following size settings may result in decreased performance. Please consult documentation for size recommendations based on your environment.

Never scan message larger than: (Add a trailing K for kilobytes, M for megabytes, or no letters for bytes.)
[1M]> 

Always scan message smaller than: (Add a trailing K for kilobytes, M for megabytes, or no letters for bytes.)
[512K]> 

Please specify the IronPort Anti-Spam scanning timeout (in seconds)
[60]> 

Would you like to enable regional scanning? [N]> 

IronPort Anti-Spam scanning is now enabled on the system. Please note: you must issue the 'policyconfig' command (CLI) or Mail Policies (GUI) to configure Cisco IronPort scanning behavior for default and custom Incoming and Outgoing Mail Policies. This is recommended for your DEFAULT policy.

IronPort Anti-Spam scanning: Enabled

Choose the operation you want to perform:
- SETUP - Edit IronPort Anti-Spam settings.

[>] 
```
**antispamstatus**

**Description**

Display anti-spam status.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

**Example**

```
mail3.example.com> antispamstatus
Choose the operation you want to perform:
  - IRONPORT - Display IronPort Anti-Spam version and rule information.
  - CLOUDMARK - Display Cloudmark Service Provider Edition version and rule information.
  - MULTISCAN - Display Intelligent Multi-Scan version and rule information.
[
> ironport
Component              Last Update                  Version
CASE Core Files        Never updated                3.4.0-013
CASE Utilities         Never updated                3.4.0-013
Structural Rules       Never updated 3.3.1-009-20141210_214201
Web Reputation DB      Never updated 20141221_111021
Web Reputation Rules   Never updated 20141221_111021-20141221_170330
Content Rules          Never updated                unavailable
Content Rules Update   Never updated                unavailable
Last download attempt made on: Never
```

**antispamupdate**

**Description**

Manually request an immediate update of Anti-Spam rules and related CASE components. This also includes the Anti-Spam rules and CASE components used by Intelligent Multi-Scan (IMS), but not for the third-party anti-spam engines used by IMS.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto).

**Batch Command:** This command does not support a batch format.
Example

mail3.example.com> antispamupdate

Choose the operation you want to perform:
- MULTISCAN - Request updates for Intelligent Multi-Scan
- IRONPORT - Request updates for IronPort Anti-Spam
- CLOUDMARK - Request updates for Cloudmark Anti-Spam

[>] ironport

Requesting check for new CASE definitions

incomingrelayconfig

Description

Use the incomingrelayconfig command to enable and configure the Incoming Relays feature. In the following examples, the Incoming Relays feature is first enabled, and then two relays are added, one is modified, and one is deleted.

Usage

Commit: This command requires a 'commit'.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example: Enabling Incoming Relays

Configuring an Incoming Relay

mail3.example.com> incomingrelayconfig

Incoming relays: Disabled

Choose the operation you want to perform:
- SETUP - Edit update configuration.
- RELAYLIST - Configure incoming relays.
[>] setup

This command helps your Cisco IronPort appliance determine the sender's originating IP address.

You should ONLY enable this command if your Cisco IronPort appliance is NOT directly connected to the Internet as the "first hop" in your email infrastructure.

You should configure this feature if other MTAs or servers are configured at your network's perimeter to relay mail to your Cisco IronPort appliance.

Do you want to enable and define incoming relays? [N]> y

Incoming relays: Enabled

Choose the operation you want to perform:
- SETUP - Edit update configuration.
- RELAYLIST - Configure incoming relays.
[]> relaylist

There are no relays defined.

Choose the operation you want to perform:
- NEW - Create a new entry

[]> new

Enter a name for this incoming relay (Ex: "first-hop")

[]> first-hop

Enter the IP address of the incoming relay. IPv4 and IPv6 addresses are supported.

For IPv4, CIDR format subnets such as 10.1.1.0/24, IP address ranges such as 10.1.1.10-20, and subnets such as 10.2.3. are allowed.

For IPv6, CIDR format subnets such as 2001:db8::/32 and IP address ranges such as 2001:db8::1-2001:db8::11 are allowed.

Hostnames such as crm.example.com and partial hostnames such as .example.com are allowed.

[]> 192.168.1.1

Do you want to use the "Received:" header or a custom header to determine the originating IP address?
1. Use "Received:" header
2. Use a custom header

[1] 1

Within the "Received:" header, enter the special character or string after which to begin parsing for the originating IP address:

[from]> [

Within the headers, enter the position of the "Received:" header that contains the originating IP address:

[1] 1

There is 1 relay defined.

Choose the operation you want to perform:
- NEW - Create a new entry
- EDIT - Modify an entry
- DELETE - Remove an entry
- PRINT - Display the table

[1] print

<table>
<thead>
<tr>
<th>Relay Name</th>
<th>IP Address</th>
<th>Header</th>
<th>Match</th>
</tr>
</thead>
<tbody>
<tr>
<td>first-hop</td>
<td>192.168.1.1</td>
<td>Received</td>
<td>[</td>
</tr>
</tbody>
</table>

There is 1 relay defined.

Choose the operation you want to perform:
- NEW - Create a new entry
- EDIT - Modify an entry
- DELETE - Remove an entry
- PRINT - Display the table

[1] new

Enter a name for this incoming relay (Ex: "first-hop")

[1] second-hop

Enter the IP address of the incoming relay. IPv4 and IPv6 addresses are supported.
For IPv4, CIDR format subnets such as 10.1.1.0/24, IP address ranges such as 10.1.1.10-20, and subnets such as 10.2.3. are allowed.

For IPv6, CIDR format subnets such as 2001:db8::/32 and IP address ranges such as 2001:db8::1-2001:db8::11 are allowed.

Hostnames such as crm.example.com and partial hostnames such as .example.com are allowed.

Do you want to use the "Received:" header or a custom header to determine the originating IP address?
1. Use "Received:" header
2. Use a custom header

Enter the custom header name that contains the originating IP address:

192.168.1.2

There are 2 relays defined.

Choose the operation you want to perform:
- NEW - Create a new entry
- EDIT - Modify an entry
- DELETE - Remove an entry
- PRINT - Display the table

Choose the operation you want to perform:
- NEW - Create a new entry
- EDIT - Modify an entry
- DELETE - Remove an entry
- PRINT - Display the table

Choose the operation you want to perform:
- NEW - Create a new entry
- EDIT - Modify an entry
- DELETE - Remove an entry
- PRINT - Display the table

Choose the operation you want to perform:
- NEW - Create a new entry
- EDIT - Modify an entry
- DELETE - Remove an entry
- PRINT - Display the table
slblconfig

Description

Configure End-User Safelist/Blocklist.

Note

Safelists/Blocklists must be enabled on the appliance via the GUI in order to run this command.

Usage

Commit: This command does not require a ‘commit’.

Batch Command: This command supports a batch format.

Batch Format - Import

Batch Format

Replaces all entries in the End-User Safelist/Blocklist with entries present in the specified file.

```
slblconfig import <filename> <ignore invalid entries>
```

- `filename` - Name of the file that has to be imported. The file must be in the `/configuration` directory on the appliance.
- `ignore invalid entries` - Whether to ignore invalid entries or not. Either ‘Yes’ or ‘No.’

Batch Format - Export

Exports all entries in the End-User Safelist/Blocklist to a file the appliance.

```
slblconfig export
```

The appliance saves a .CSV file to the `/configuration` directory using the following naming convention:

```
slbl<timestamp><serial number>.csv
```

Example - Importing Safelist/Blocklist Entries

```
mail.example.com> slblconfig
End-User Safelist/Blocklist: Enabled
Choose the operation you want to perform:
- IMPORT - Replace all entries in the End-User Safelist/Blocklist.
- EXPORT - Export all entries from the End-User Safelist/Blocklist.
[] import

Currently available End-User Safelist/Blocklist files:
```
1. slbl.csv
Choose the file to import from.
[1]> 1

Do you want to ignore invalid entries? [Y]> Y

End-User Safelist/Blocklist import has been initiated...
Please wait while this operation executes.

End-User Safelist/Blocklist successfully imported.

Choose the operation you want to perform:
- IMPORT - Replace all entries in the End-User Safelist/Blocklist.
- EXPORT - Export all entries from the End-User Safelist/Blocklist.
[]>

### Graymail Detection and Safe Unsubscribing

**Task** | **Command**
---|---
Configure graymail detection and safe unsubscribing global settings | `graymailconfig`
Configuring the incoming mail policy for graymail detection and safe unsubscribing | `policyconfig`
Display the details of the existing graymail rules | `graymailstatus`
Manually request update of the graymail rules | `graymailupdate`

### `graymailconfig`

**Description**

Configure graymail detection and safe unsubscribing global settings.

**Note**

To enable graymail detection and safe unsubscribing, anti-spam scanning must be enabled globally. This can be either the IronPort Anti-Spam or the Intelligent Multi-Scan feature.

To configure policy settings for graymail detection and safe unsubscribing, use the `policyconfig` command. For more information, see Create an Incoming Policy to Drop the Messages Identified as Bulk Email or Social Network Email, page 3-217.

**Usage**

**Commit**: This command requires a ‘commit’.

**Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).

**Batch Command**: This command supports a batch format. For details, see the inline help by typing the command: `help graymailconfig`.
Example

Graymail Detection: Disabled

Choose the operation you want to perform:
- SETUP - Configure Graymail.
[])> setup

Would you like to use Graymail Detection? [Y]>

Increasing the following size settings may result in decreased performance. Please consult documentation for size recommendations based on your environment.

Maximum Message Size to Scan (Add a trailing K for kilobytes, M for megabytes, or no letters for bytes.):
[1M]>

Timeout for Scanning Single Message (in seconds):
[60]>

Graymail Safe Unsubscribe: Disabled

Would you like to use Graymail Safe Unsubscribe? [Y]>

Graymail Detection and Safe Unsubscribe is now enabled. Please note: The global settings are recommended only for your DEFAULT mail policy. To configure policy settings, use the incoming or outgoing policy page on web interface or the 'policyconfig' command in CLI.

graymailstatus

Description

Display the details of the existing graymail rules.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format

Example

mail.example.com> graymailstatus

<table>
<thead>
<tr>
<th>Component</th>
<th>Version</th>
<th>Last Updated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graymail Library</td>
<td>01.378.53#15</td>
<td>Never updated</td>
</tr>
<tr>
<td>Graymail Tools</td>
<td>1.0</td>
<td>Never updated</td>
</tr>
</tbody>
</table>
graymailupdate

Description

Manually request update of the graymail rules.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

mail.example.com> graymailupdate

Requesting check for new Graymail updates.

Anti-Virus

This section contains the following CLI commands:
- antivirusconfig
- antivirusstatus
- antivirusupdate

antivirusconfig

Description

Configure anti-virus policy.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

In the following example, the antivirusconfig command is used to enable Sophos virus scanning on the system and set the time-out value to 60 seconds. To configure the update server, update interval, and optional proxy server, see “updateconfig” on page 112.
The first time you invoke the `antivirusconfig` command, you may be presented with a license agreement, if you did not accept the license during the `systemsetup` command. If you do not accept the license agreement, the Sophos virus scanning engine will not be enabled on the appliance.

```
mail3.example.com> antivirusconfig
Choose the operation you want to perform:
- SOPHOS - Configure Sophos Anti-Virus.
- MCAFEE - Configure McAfee Anti-Virus.
[>] sophos
Sophos Anti-Virus: Disabled
Choose the operation you want to perform:
- SETUP - Configure Sophos Anti-Virus.
[>] setup
Sophos Anti-Virus scanning: Disabled
Would you like to use Sophos Anti-Virus scanning? [Y]> y
(First time users see the license agreement displayed here.)
Please specify the Anti-Virus scanning timeout (in seconds)
[60]> 60
Sophos Anti-Virus scanning is now enabled on the system.
Please note: you must issue the 'policyconfig' command (CLI) or Mail Policies (GUI) to configure Sophos Anti-Virus scanning behavior for default and custom Incoming and Outgoing Mail Policies. This is recommended for your DEFAULT policy.

Sophos Anti-Virus: Enabled
Choose the operation you want to perform:
- SETUP - Configure Sophos Anti-Virus.
[>
```

**Viewing Anti-Virus IDE Details**

AsyncOS provides detailed status on the specific anti-virus signature files (IDE files) that have been downloaded by the appliance. You can access these details using the `antivirusconfig` -> `detail` subcommand. For example:

```
mail3.example.com> antivirusconfig
Choose the operation you want to perform:
- SOPHOS - Configure Sophos Anti-Virus.
- MCAFEE - Configure McAfee Anti-Virus.
[>] sophos
Sophos Anti-Virus: Enabled
Choose the operation you want to perform:
- SETUP - Configure Sophos Anti-Virus.
- STATUS - View Sophos Anti-Virus status.
- DETAIL - View Sophos Anti-Virus detail.
[>] detail
```
Sophos Anti-Virus:

Product - 3.87
Engine - 2.25.0
Product Date - 01 Nov 2004

Sophos IDEs currently on the system:

'Mkar-E.Ide'       Virus Sig. - 23 Dec 2004 01:24:02
'Rbot-Sd.Ide'      Virus Sig. - 22 Dec 2004 19:10:06
'Santy-A.Ide'      Virus Sig. - 22 Dec 2004 06:16:32
'Bachanan.Ide'     Virus Sig. - 21 Dec 2004 18:33:58
'Rbot-Sb.Ide'      Virus Sig. - 21 Dec 2004 14:50:46
'Rbotry.Ide'       Virus Sig. - 21 Dec 2004 06:13:40
'Sdbot-Si.Ide'     Virus Sig. - 20 Dec 2004 20:52:04
'Oddbob-A.Ide'     Virus Sig. - 19 Dec 2004 23:34:06
'Rbot-Rw.Ide'      Virus Sig. - 19 Dec 2004 00:50:34
'Wortd.Ide'        Virus Sig. - 18 Dec 2004 07:02:44
'Delf-Jb.Ide'      Virus Sig. - 17 Dec 2004 22:32:08

antivirusstatus

Description

Display Anti-Virus status.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

mail3.example.com> antivirusstatus

Choose the operation you want to perform:
- McAfee - Display McAfee Anti-Virus version information
- Sophos - Display Sophos Anti-Virus version information

[]> sophos

SAV Engine Version 3.85
IDE Serial 2004101801
Engine Update Mon Sep 27 14:21:25 2004
Last IDE Update Mon Oct 18 02:56:48 2004
Last Update Attempt Mon Oct 18 11:11:44 2004
Last Update Success Mon Oct 18 02:56:47 2004
antivirusupdate

Description

Manually update virus definitions.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto).
Batch Command: This command does not support a batch format.

Example

mail3.example.com> antivirusupdate

Choose the operation you want to perform:
- MCAFEE - Request updates for McAfee Anti-Virus
- SOPHOS - Request updates for Sophos Anti-Virus
{}> sophos

Requesting update of virus definitions
mail3.example.com>

Command Line Management

This section contains the following CLI commands:
- commit
- commitdetail
- clearchanges or clear
- help or h or ?
- rollbackconfig
- quit or q or exit

commit

Description

Commit changes. Entering comments after the commit command is optional.

Usage

Commit: N/A
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format.

**Example**

```
mail3.example.com> commit
Please enter some comments describing your changes:
[/]> Changed "psinet" IP Interface to a different IP address
Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT
```

**commitdetail**

**Description**

Display detailed information about the last commit.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

**Example**

```
mail3.example.com> commitdetail
Commit at Mon Apr 18 13:46:28 2005 PDT with comments: "Enabled loopback".
mail3.example.com>
```

**clearchanges or clear**

**Description**

The `clear` command clears any configuration changes made since the last `commit` or `clear` command was issued.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format
Example

mail3.example.com> clear

Are you sure you want to clear all changes since the last commit?  [Y]> y

Changes cleared: Mon Jan 01 12:00:01 2003
mail3.example.com>

help or h or ?

Description

The help command lists all available CLI commands and gives a brief description of each command. The help command can be invoked by typing either help or a single question mark (?) at the command prompt.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format

Example

mail3.example.com> help
Displays the list of all available commands.

rollbackconfig

The rollbackconfig command allows you to rollback to one of the previously committed 10 configurations.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail.example.com> rollbackconfig

Previous Commits:

<table>
<thead>
<tr>
<th>Committed On</th>
<th>User</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fri May 23 06:53:43 2014</td>
<td>admin</td>
<td>new user</td>
</tr>
<tr>
<td>Fri May 23 06:50:57 2014</td>
<td>admin</td>
<td>rollback</td>
</tr>
<tr>
<td>Fri May 23 05:47:26 2014</td>
<td>admin</td>
<td></td>
</tr>
</tbody>
</table>
4. Fri May 23 05:45:51 2014 admin edit user

Enter the number of the config to revert to.
[>] 2

Are you sure you want to roll back the configuration? [N]> y

Reverted to Fri May 23 06:50:57 2014 admin rollback

Do you want to commit this configuration now? [N]> y

Committed the changes successfully

quit or q or exit

Description

The `quit` command logs you out of the CLI application. Configuration changes that have not been committed are cleared. The `quit` command has no effect on email operations. Logout is logged into the log files. (Typing `exit` is the same as typing `quit`.)

Usage

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format

Example

mail3.example.com> quit

Configuration changes entered but not committed. Exiting will lose changes.
Type ‘commit’ at the command prompt to commit changes.
Are you sure you wish to exit?  [N]> Y

Configuration File Management

This section contains the following CLI commands:

- `loadconfig`
- `mailconfig`
- `resetconfig`
- `saveconfig`
- `showconfig`
loadconfig

Description

Load a configuration file.

![Note]

Loading configuration on clustered machines is supported only using GUI. For instructions, see User Guide for AsyncOS for Cisco Email Security Appliances.

Usage

Commit: This command requires a ‘commit’.  
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).  
Batch Command: This command does not support a batch format

Example

In this example, a new configuration file is imported from a local location.

```
mail3.example.com> loadconfig

1. Paste via CLI 
2. Load from file 
[1]> 2

Enter the name of the file to import:
[1]> changed.config.xml

Values have been loaded. 
Be sure to run "commit" to make these settings active.

mail3.example.com> commit

Please enter some comments describing your changes:
[1]> loaded new configuration file

Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT
```

In this example, a new configuration file is pasted directly at the command line. (Remember to type Control-D on a blank line to end the paste command.) Then, the system setup wizard is used to change the default hostname, IP address, and default gateway information. Finally, the changes are committed.

```
mail3.example.com> loadconfig

1. Paste via CLI 
2. Load from file 
[1]> 1

Paste the configuration file now. 
Press CTRL-D on a blank line when done.

[The configuration file is pasted until the end tag </config>. Control-D is entered on a separate line.]

Values have been loaded. 
Be sure to run "commit" to make these settings active.
```
mail3.example.com> systemsetup
(The system setup wizard is run.)

mail3.example.com> commit
Please enter some comments describing your changes:
[{}> pasted new configuration file and changed default settings via systemsetup

Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT

mailconfig

Description

To test the configuration, you can use the mailconfig command immediately to send a test email containing the system configuration data you just created with the systemsetup command.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format

Example

mail.example.com> mailconfig
Please enter the email address to which you want to send the configuration file. Separate multiple addresses with commas.
[{}> user@example.com

Choose the password option:
1. Mask passwords (Files with masked passwords cannot be loaded using loadconfig command)
2. Encrypt passwords
3. Plain passwords
[1]> 2

The configuration file has been sent to user@example.com.

Send the configuration to a mailbox to which you have access to confirm that the system is able to send email on your network.

Note

For enhanced security, if encryption of sensitive data in the appliance is enabled in fipsconfig command, you cannot use Plain passwords option.
resetconfig

Description
When physically transferring the appliance, you may want to start with factory defaults. The resetconfig command resets all configuration values to factory defaults. This command is extremely destructive, and it should only be used when you are transferring the unit or as a last resort to solving configuration issues. It is recommended you run the systemsetup command after reconnecting to the CLI after you have run the resetconfig command.

Note
The resetconfig command only works when the appliance is in the offline state. When the resetconfig command completes, the appliance is automatically returned to the online state, even before you run the systemsetup command again. If mail delivery was suspended before you issued the resetconfig command, the mail will attempt to be delivered again when the resetconfig command completes.

Warning
The resetconfig command will return all network settings to factory defaults, potentially disconnecting you from the CLI, disabling services that you used to connect to the appliance (FTP, Telnet, SSH, HTTP, HTTPS), and even removing additional user accounts you created with the userconfig command. Do not use this command if you are not able to reconnect to the CLI using the Serial interface or the default settings on the Management port through the default Admin user account.

Usage
Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.
Batch Command: This command does not support a batch format.

Example
mail3.example.com> suspend

Delay (seconds, minimum 30):
[30]> 45

Waiting for listeners to exit...
Receiving suspended.
Waiting for outgoing deliveries to finish...
Mail delivery suspended.

mail3.example.com> resetconfig

Are you sure you want to reset all configuration values? [N]> Y

All settings have been restored to the factory default.
saveconfig

Description

The `saveconfig` command saves the configuration file with a unique filename to the configuration directory.

**Note**
If you are on a clustered environment, this command saves the complete cluster configuration. To run this command on a clustered machine, change your configuration mode to cluster.

Usage

**Commit:** This command does not require a `commit`.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format

Example

In the following example, the passwords in the configuration file is encrypted and saved in the configuration directory.

```
mail.example.com> saveconfig
Choose the password option:
1. Mask passwords (Files with masked passwords cannot be loaded using loadconfig command)
2. Encrypt passwords
3. Plain passwords
[1]> 2

File written on machine "mail.example.com" to the location "/configuration/C100V-4232116C4E14C7C4C7F-789DA3BD955-20140319T050635.xml".
Configuration saved.
```

**Note**
For enhanced security, if encryption of sensitive data in the appliance is enabled in `fipsconfig` command, you cannot use Plain passwords option.

showconfig

Description

The `showconfig` command prints the current configuration to the screen.

Usage

**Commit:** This command does not require a `commit`.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format
Example

In the following example, the configuration is displayed on CLI and the passwords in the configuration are encrypted.

```
mail.example.com> showconfig

Choose the password display option:
1. Mask passwords (Files with masked passwords cannot be loaded using loadconfig command)
2. Encrypt passwords
3. Plain passwords
[1]> 2
```

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE config SYSTEM "config.dtd">
<!--
Product: Cisco C100V Email Security Virtual Appliance
Model Number: C100V
Version: 9.0.0-038
Serial Number: 4232116C4E14C70C4C7F-7898DA3BD955
Number of CPUs: 2
Memory (MB): 6144
Current Time: Wed Mar 19 05:30:05 2014
-->
<config>

********************************************************************************
** Network Configuration **
********************************************************************************

[The remainder of the configuration file is printed to the screen.]
```

Note

For enhanced security, if encryption of sensitive data in the appliance is enabled in fipsconfig command, you cannot use Plain passwords option.

Cluster Management

This section contains the following CLI commands:

- `clusterconfig`

clusterconfig

Description

The `clusterconfig` command is used to configure cluster-related settings. If this machine is not part of a cluster, running `clusterconfig` will give you the option of joining a cluster or creating a new cluster. The `clusterconfig` command provides additional subcommands:

**Non-Cluster Commands**

The following commands are available when you are not in a cluster.
• `clusterconfig new <name>` – This will create a new cluster with the given name. This machine will be a member of this cluster and a member of a default cluster group called “Main Group”.
  
  `<name>` - The name of the new cluster.

• `clusterconfig join [--port=xx] <ip_of_remote_cluster> [admin_password] <groupname>` – This will add this machine to a cluster.
  
  `<ip_of_remote_cluster>` - The IP address of another machine in the cluster.
  
  `<admin_password>` - The admin password of the cluster. This should not be specified if joining over CCS.
  
  `<groupname>` - The name of the group to join.
  
  `<port>` - The port of the remote machine to connect to (defaults to 22).

• `clusterconfig prepjoin print` – This will display the information needed to prepare the joining of this machine to a cluster over a CCS port.

**Cluster Commands**

The following commands are available when you are in a cluster.

• `clusterconfig addgroup <groupname>` – Creates a new cluster group. The group starts off with no members.

• `clusterconfig renamegroup <old_groupname> <new_groupname>` – Change the name of a cluster group.

• `clusterconfig deletegroup <groupname> [new_groupname]` – Remove a cluster group.
  
  `<groupname>` - Name of the cluster group to remove.
  
  `<new_groupname>` - The cluster group to put machines of the old group into.

• `clusterconfig setgroup <machinename> <groupname>` – Sets (or changes) which group a machine is a member of.
  
  `<machinename>` - The name of the machine to set.
  
  `<groupname>` - The group to set the machine to.

• `clusterconfig removemachine <machinename>` – Remove a machine from the cluster.

• `clusterconfig setname <name>` – Changes the name of the cluster to the given name.

• `clusterconfig list` – Display all the machines currently in the cluster.

• `clusterconfig connstatus` – Display all the machines currently in the cluster and add routing details for disconnected machines.

• `clusterconfig disconnect <machinename>` – This will temporarily detach a machine from the cluster.
  
  `<machinename>` - The name of the machine to disconnect.

• `clusterconfig reconnect <machinename>` - This will restore connections with machines that were detached with the “disconnect” command.
• `clusterconfig prepjoin new <serial_number> <hostname> <user_key>` — This will add a new host that is to join the cluster over the CCSport.
  
  `<serial_number>` - The serial number of the machine being added.
  `<hostname>` - The host name of the machine being added.
  `<user_key>` - The SSH user key from the "prepjoin print" command from the joining machine.

• `clusterconfig prepjoin delete <serial_number|hostname>` — This will remove a host that was previously indicated to be added from the "prepjoin new" command. This is only necessary to be used if you later decide not to add the host. When a host is successfully added to the cluster, its prepjoin information is automatically removed.

**Usage**

**Commit**: This command does not require a ‘commit’.

**Cluster Management**: This command is restricted to cluster mode.

**Batch Command**: This command does not support a batch format.

**Example**

For an explanation of the `clusterconfig` command and its uses, see *User Guide for AsyncOS for Cisco Email Security Appliances*.

**Data Loss Prevention**

This section contains the following CLI commands:

- `dlprollback`
- `dlpstatus`
- `dlupdate`

**dlprollback**

**Description**

Rollback DLP engine and config to the previous version.

**Note**

DLP must already be configured via the DLP Global Settings page in the GUI before you can use the `dlprollback` command.
Warning

This command will revert your appliance to older DLP policies. You must re-enable DLP policies in Outbound Mail Policies so that DLP scanning can be resumed.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is can be used at cluster, group or machine mode.

Batch Command: This command does not support a batch format.

Example

mail.example.com> dlprollback

This will revert to older DLP policies.

IMPORTANT: After rollback, you must re-enable DLP policies in Outbound Mail Policies so that DLP scanning can be resumed successfully.

Do you wish to rollback? [N]> Y

Requesting rollback for DLP engine.

Re-enable DLP policies in Outbound Mail Policies when rollback is completed (Please check rollback status in mail logs)

dlpstatus

Request version information for DLP Engine.

Note

DLP must already be configured via the DLP Global Settings page in the GUI before you can use the dlpstatus command.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is can be used at cluster, group or machine mode.

Batch Command: This command does not support a batch format.

Example

mail.example.com> dlpstatus

Component | Version | Last Updated
------------|---------|----------------
RSA DLP Engine | 3.0.2.31 | Never updated
dlpupdate

Description

Update RSA DLP Engine.

Note

DLP must already be configured via the DLP Global Settings page in the GUI before you can use the dlpupdate command.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used at cluster, group or machine mode.
Batch Command: This command supports a batch format.

Batch Format

The batch format of the dlpupdate command forces an update of the DLP engine even if no changes are detected.

dlpupdate [force]

Example

mail.example.com> dlpupdate
Checking for available updates. This may take a few seconds..
Could not check for available updates. Please check your Network and Service Updates settings and retry.

Choose the operation you want to perform:
  - SETUP - Enable or disable automatic updates for DLP Engine.
>
setup

Automatic updates for DLP are disabled
Do you wish to enable automatic updates for DLP Engine? [N]> y

Choose the operation you want to perform:
  - SETUP - Enable or disable automatic updates for DLP Engine.
>

S/MIME Security Services

smimeconfig

Description

Configure S/MIME settings such as sending profiles, managing public keys, and so on.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Examples

• Creating a Sending Profile for Signing and Encryption, page 3-31
• Adding a Public Key for Encryption, page 3-33

Creating a Sending Profile for Signing and Encryption

The following example shows how to create a sending profile for signing and encrypting messages using S/MIME.

mail.example.com> smimeconfig

Choose the operation you want to perform:
- GATEWAY - Manage S/MIME gateway configuration.
[]> gateway

Choose the operation you want to perform:
- VERIFICATION - Manage S/MIME Public Keys.
- SENDING - Manage S/MIME gateway sending profiles.
[]> sending

Choose the operation you want to perform:
- NEW - Create a new S/MIME sending profile.
- EDIT - Edit a S/MIME sending profile.
- RENAME - Rename a S/MIME sending profile.
- DELETE - Delete a S/MIME sending profile.
- IMPORT - Import a S/MIME sending profile from a file
- EXPORT - Export a S/MIME sending profile to a file
- PRINT - Display S/MIME sending profiles.
[]> new

Enter a name for this profile:
> hr_sign_and_encrypt

1. Encrypt
2. Sign
3. Sign/Encrypt
4. Triple
Enter S/MIME mode:
Adding a Public Key for Encryption

The following example shows how to add the public key of the recipient's S/MIME certificate to the appliance for encrypting messages.

mail.example.com> smimeconfig

Choose the operation you want to perform:
  - GATEWAY - Manage S/MIME gateway configuration.
[]> gateway

Choose the operation you want to perform:
  - VERIFICATION - Manage S/MIME Public Keys.
  - SENDING - Manage S/MIME gateway sending profiles.
[]> verification

Choose the operation you want to perform:
  - NEW - Create a new S/MIME Public Key.
  - IMPORT - Import the list of S/MIME Public Keys from a file.
[]> new
Enter a name for this profile:
> hr_signing

1. Import
2. Paste
Choose one of the options for the certificate introducing:
[2]> Paste public certificate in PEM format (end with '.'): 
-----BEGIN CERTIFICATE-----
MIIDdDCCAlygAwIBAgIBDTANBgkqhkiG9w0BAQUFADCBljELMAkGA1UEBhMCSU4x
CzAJBgNVBAg...
-----END CERTIFICATE-----
C=IN,ST=KA,L=BN,O=Cisco,OU=stg,CN=cert_for_enc,emailAddress=admin@example.com

Choose the operation you want to perform:
- NEW - Create a new S/MIME Public Key.
- EDIT - Edit a S/MIME Public Key.
- RENAME - Rename a S/MIME Public Key.
- DELETE - Delete a S/MIME Public Key.
- IMPORT - Import the list of S/MIME Public Keys from a file.
- EXPORT - Export the list of S/MIME Public Keys to a file.
- PRINT - Display S/MIME Public Keys.
[1]> print

S/MIME Public Keys
Name       Emails                     Domains                    Remaining
---------  -------------------------  -------------------------  ---------
hr_signin  admin@vm30bsd0008.ibqa     dns.vm30bsd0008.ibqa       145 days

Domain Keys

This section contains the following CLI commands:
- domainkeysconfig

domainkeysconfig

Description
Configure DomainKeys/DKIM support.

Usage
Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command supports a batch format.
Note

For enhanced security, if encryption of sensitive data in the appliance is enabled in FIPS mode, you will not be able view the private key. If you intend to edit the private key, you can enter an existing private key or generate a new private key.

Batch Format - Signing Profiles

The batch format of the `domainkeysconfig` command can be used to create, edit, or delete signing profiles.

- Adding a DomainKeys/DKIM signing profile:

  ```
  domainkeysconfig profiles signing new <name> <type> <domain>
  <selector> <user-list> [options]
  ```

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;name&gt;</code></td>
<td>Name of domain profile.</td>
</tr>
<tr>
<td><code>&lt;type&gt;</code></td>
<td>Type of domain. Can be <code>dk</code> or <code>dkim</code>.</td>
</tr>
<tr>
<td><code>&lt;domain&gt;</code></td>
<td>Domain field of domain profile. This forms the <code>d</code> tag of the Domain-Keys signature.</td>
</tr>
<tr>
<td><code>&lt;selector&gt;</code></td>
<td>Selector field of domain profile. This forms the <code>s</code> tag of the Domain-Keys signature.</td>
</tr>
<tr>
<td><code>&lt;user-list&gt;</code></td>
<td>Comma separated list of domain profile users. Users are used to match against email addresses to determine if a specific domain profile should be used to sign an email. Use the special keyword <code>all</code> to match all domain users.</td>
</tr>
</tbody>
</table>

[options]

- `--key_name` The name of the private key that will be used for signing.
- `--canon` The canonicalization algorithm to use when signing by DK. Currently supported algorithms are `simple` and `nofws`. Default is `nofws`.
- `--body_canon` The body canonicalization algorithm of to use when signing by DKIM. Currently supported algorithms are `simple` and `relaxed`. Default is `simple`.
- `--header_canon` The headers canonicalization algorithm of to use when signing by DKIM. Currently supported algorithms are `simple` and `relaxed`. Default is `simple`.
- `--body_length` Number of bytes of canonicalized body that are used to calculate the signature. Is used only in DKIM profiles. If used this value becomes `l` tag of the signature. By default it is not used.
Editing a signing profile:

```
domainkeysconfig profiles signing edit <name>

[signing-profile-options]
```

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--headers_select</td>
<td>Determines how to select headers for signing. Is used only in DKIM profiles. Can be one of all, standard, standard_and_custom. All means to sign all non-repetitive headers. &quot;standard&quot; means to sign predefined set of well known headers such as Subject, From, To, Sender, MIME headers etc. standard_and_custom means to sign well known headers and user-defined set of headers. Default is standard.</td>
</tr>
<tr>
<td>--custom_headers</td>
<td>User-defined set of headers to sign. Is used only in DKIM profiles if headers_select is standard_and_custom. Default is empty set.</td>
</tr>
<tr>
<td>--i_tag</td>
<td>Determines whether to include the i tag into the signature. Possible values are yes or no. Default is yes.</td>
</tr>
<tr>
<td>--agent_identity</td>
<td>The identity of the user or agent on behalf of which this message is signed. The syntax is a standard email address where the local-part may be omitted. Domain part of this address should be a sub-domain of or equal to the &lt;domain&gt;. This option is only applicable if --i_tag value is set to yes. Default is an empty local-part followed by an @ and by the &lt;domain&gt;.</td>
</tr>
<tr>
<td>--q_tag</td>
<td>Determines whether to include the q tag into the signature. Possible values are yes or no. Default is yes.</td>
</tr>
<tr>
<td>--t_tag</td>
<td>Determines whether to include the t tag into the signature. Possible values are yes or no. Default is yes.</td>
</tr>
<tr>
<td>--x_tag</td>
<td>Determines whether to include the x tag into the signature. Possible values are yes or no. Default is yes.</td>
</tr>
<tr>
<td>--expiration_time</td>
<td>Number of seconds before signature is expired. Is used only in DKIM profiles. This value becomes a difference of x and t tags of the signature. This option is only applicable if --x_tag value is set to yes. Default is 31536000 seconds (one year).</td>
</tr>
<tr>
<td>--z_tag</td>
<td>Determines whether to include the z tag into the signature. Possible values are yes or no. Default is no.</td>
</tr>
</tbody>
</table>
Signing profile options:
- rename <name>
- domain <domain>
- selector <selector>
- canonicalization <canon>
- canonicalization <header_canon> <body_canon>
- key <key_name>
- bodylength <body_length>
- headerselect <header_select>
- customheaders <custom_headers>
- itag <i_tag> [<agent_identity>]
- qtag <q_tag>
- ttag <t_tag>
- xtag <x_tag> [<expiration_time>]
- ztag <z_tag>
- new <user-list>
- delete <user-list>
- print
- clear

• Delete a signing profile:

  domainkeysconfig profiles signing delete <name>

• Show a list of signing profiles:

  domainkeysconfig profiles signing list

• Print the details of a signing profile:

  domainkeysconfig profiles signing print <name>

• Test a signing profile:

  domainkeysconfig profiles signing test <name>

• Import a local copy of your signing profiles:

  domainkeysconfig profiles signing import <filename>
• Export a copy of your signing profile from the appliance:
  
  `domainkeysconfig profiles signing export <filename>`

• Delete all the signing profiles from the appliance:
  
  `domainkeysconfig profiles signing clear`

### Batch Format - Verification Profiles

• Create a new DKIM verification profile:
  
  `domainkeysconfig profiles verification new <name> <verification-profile-options>`

<table>
<thead>
<tr>
<th>Table 3-2</th>
<th><code>domainkeysconfig</code> Verification Profile Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argument</td>
<td>Description</td>
</tr>
<tr>
<td>--name</td>
<td>The name of DKIM verification profile.</td>
</tr>
<tr>
<td>--min_key_size</td>
<td>The smallest key to be accepted. Possible key-length values (in bits) are 512, 768, 1024, 1536 and 2048. Default is 512.</td>
</tr>
<tr>
<td>--max_key_size</td>
<td>The largest key to be accepted. Possible key-length values (in bits) are 512, 768, 1024, 1536 and 2048. Default is 2048.</td>
</tr>
<tr>
<td>--max_signatures_num</td>
<td>A maximum number of signatures in the message to verify. Possible value is any positive number. Default is 5.</td>
</tr>
<tr>
<td>--key_query_timeout</td>
<td>A number of seconds before the key query is timed out. Possible value is any positive number. Default is 10.</td>
</tr>
<tr>
<td>--max_systemtime_divergence</td>
<td>A number of seconds to tolerate wall clock asynchronization between sender and verifier. Possible value is any positive number. Default is 60.</td>
</tr>
<tr>
<td>--use_body_length</td>
<td>Whether to use a body length parameter. Possible values are yes or no. Default is yes.</td>
</tr>
<tr>
<td>--tempfail_action</td>
<td>The SMTP action should be taken in case of temporary failure. Possible values are accept or reject. Default is accept.</td>
</tr>
<tr>
<td>--tempfail_response_code</td>
<td>The SMTP response code for rejected message in case of temporary failure. Possible value is number in 4xx format. Default is 451.</td>
</tr>
<tr>
<td>--tempfail_response_text</td>
<td>The SMTP response text for rejected message in case of temporary failure. Default is #4.7.5 Unable to verify signature - key server unavailable.</td>
</tr>
</tbody>
</table>
## Domain Keys

### Table 3-2  domainkeysconfig Verification Profile Options

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--permfail_action</td>
<td>The SMTP action should be taken in case of permanent failure. Possible values are accept or reject. Default is accept.</td>
</tr>
<tr>
<td>--permfail_response_code</td>
<td>The SMTP response code for rejected message in case of permanent failure. Possible value is number in 5XX format. Default is 550.</td>
</tr>
<tr>
<td>--permfail_response_text</td>
<td>The SMTP response text for rejected message in case of permanent failure. Default is #5.7.5 DKIM unauthenticated mail is prohibited.</td>
</tr>
</tbody>
</table>

- **Edit a verification profile:**
  
  ```
  domainkeysconfig profiles verification edit <name> <verification-profile-options>
  ```

- **Delete a verification profile:**
  
  ```
  domainkeysconfig profiles verification delete <name>
  ```

- **Print details of an existing verification profile:**
  
  ```
  domainkeysconfig profiles verification print <name>
  ```

- **Display a list of existing verification profiles:**
  
  ```
  domainkeysconfig profiles verification list
  ```

- **Import a file of verification profiles from a local machine:**
  
  ```
  domainkeysconfig profiles verification import <filename>
  ```

- **Export the verification profiles from the appliance:**
  
  ```
  domainkeysconfig profiles verification export <filename>
  ```

- **Delete all existing verification profiles from the appliance:**
  
  ```
  domainkeysconfig profiles verification clear
  ```
Batch Format - Signing Keys

- Create a new signing key:

  domainkeysconfig keys new <key_name> <key-options>

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--generate_key</td>
<td>Generate a private key. Possible key-length values (in bits) are 512, 768, 1024, 1536, and 2048.</td>
</tr>
<tr>
<td>--use_key</td>
<td>Use supplied private key.</td>
</tr>
<tr>
<td>--public_key</td>
<td>Flag to derive and print to the screen a matching public key for the specified private key. If --generate_key is specified first, a new private key is generated first, followed by the display of a matching public key.</td>
</tr>
</tbody>
</table>

- Edit a signing key:

  domainkeysconfig keys edit <key_name> key <key-options>

- Rename an existing signing key:

  domainkeysconfig keys edit <key_name> rename <key_name>

- To specify a public key:

  domainkeysconfig keys publickey <key_name>

- Delete a key:

  domainkeysconfig keys delete <key_name>

- Display a list of all signing keys:

  domainkeysconfig keys list

- Display all information about a specify signing key:

  domainkeysconfig keys print <key_name>

- Import signing keys from a local machine:

  domainkeysconfig keys import <filename>
• Export signing keys from the appliance:

```bash
domainkeysconfig keys export <filename>
```

• Delete all signing keys on the appliance:

```bash
domainkeysconfig keys clear
```

**Batch Format - Search for a Key or Profile**

• Search for a profile signing key:

```bash
domainkeysconfig search <search_text>
```

**Batch Format - Global Settings**

• Modify global settings for Domain Keys/DKIM on your appliance:

```bash
domainkeysconfig setup <setup_options>
```

The option available is:

- `-sign_generated_msgs` - Specify whether to sign system-generated messages. Possible values are `yes` or `no`.

**Example: Configuring Domain Keys via the CLI**

Use the `domainkeysconfig` command in the CLI to configure Domain Keys on your appliance.

The `domainkeysconfig` command has all of the features of the Mail Policies -> Domain Keys page. It also provides the ability to generate a sample Domain Keys DNS TXT record. For more information about generating sample Domain Keys DNS TXT records, see Creating a Sample Domain Keys DNS TXT Record, page 3-44.

In this example, a key is generated, and a domain profile is created:

```
mail3.example.com> domainkeysconfig
Number of DK/DKIM Signing Profiles: 0
Number of Signing Keys: 0
Number of DKIM Verification Profiles: 0
Sign System-Generated Messages: Yes

Choose the operation you want to perform:
• PROFILES - Manage domain profiles.
• KEYS - Manage signing keys.
• SETUP - Change global settings.
• SEARCH - Search for domain profile or key.
[+] keys

No signing keys are defined.

Choose the operation you want to perform:
• NEW - Create a new signing key.
```
- IMPORT - Import signing keys from a file.

[>] new

Enter a name for this signing key:
[>] testkey

1. Generate a private key
2. Enter an existing key

[1]>

Enter the size (in bits) of this signing key:
1. 512
2. 768
3. 1024
4. 1536
5. 2048

[3]>

New key "testkey" created.

There are currently 1 signing keys defined.

Choose the operation you want to perform:
- NEW - Create a new signing key.
- EDIT - Modify a signing key.
- PUBLICKEY - Create a publickey from a signing key.
- DELETE - Delete a signing key.
- PRINT - Display signing keys.
- LIST - List signing keys.
- IMPORT - Import signing keys from a file.
- EXPORT - Export signing keys to a file.
- CLEAR - Clear all signing keys.

[>] profiles

Number of DK/DKIM Signing Profiles: 0
Number of Signing Keys: 1
Number of DKIM Verification Profiles: 1
Sign System-Generated Messages: Yes

Choose the operation you want to perform:
- PROFILES - Manage domain profiles.
- KEYS - Manage signing keys.
- SETUP - Change global settings.
- SEARCH - Search for domain profile or key.

[>] signing

No domain profiles are defined.

Choose the operation you want to perform:
- NEW - Create a new domain profile.
- IMPORT - Import domain profiles from a file.

[>] new

Enter a name for this domain profile:
[>] Example

Enter type of domain profile:
1. dk
2. dkim
[2]>

The domain field forms the basis of the public-key query. The value in this field MUST match the domain of the sending email address or MUST be one of the parent domains of the sending email address. This value becomes the "d" tag of the Domain-Keys signature.

Enter the domain name of the signing domain:
[ ]> example.com

Selectors are arbitrary names below the ".domainkey." namespace. A selector value and length MUST be legal in the DNS namespace and in email headers with the additional provision that they cannot contain a semicolon. This value becomes the "s" tag of the DomainKeys Signature.

Enter selector:
[ ]> test

The private key which is to be used to sign messages must be entered. A corresponding public key must be published in the DNS following the form described in the DomainKeys documentation. If a key is not immediately available, a key can be entered at a later time.

Select the key-association method:
1. Create new key
2. Paste in key
3. Enter key at later time
4. Select existing key
[1] > 4

Enter the name or number of a signing key.
1. testkey

[1]>

The canonicalization algorithm is the method by which the headers and content are prepared for presentation to the signing algorithm. Possible choices are "simple" and "relaxed".

Select canonicalization algorithm for body:
1. simple
2. relaxed
[1] > 1

How would you like to sign headers:
1. Sign all existing, non-repeatable headers (except Return-Path header).
2. Sign "well-known" headers (Date, Subject, From, To, Cc, Reply-To, Message-ID, Sender, MIME headers).
3. Sign "well-known" headers plus a custom list of headers.
[2]>

Body length is a number of bytes of the message body to sign. This value becomes the "l" tag of the signature.
Which body length option would you like to use?
1. Whole body implied. No further message modification is possible.
2. Whole body auto-determined. Appending content is possible.
3. Specify a body length.
[1]>
Would you like to fine-tune which tags should be used in the DKIM Signature? (yes/no) [N]>

Finish by entering profile users. The following types of entries are allowed:
- Email address entries such as "joe@example.com".
- Domain entries such as "example.com".
- Partial domain entries such as ".example.com". For example, a partial domain of ".example.com" will match "sales.example.com". This sort of entry will not match the root domain ("example.com").
- Leave blank to match all domain users.

Enter user for this signing profile:
[]> sales.example.com

Do you want to add another user? [N]>

There are currently 1 domain profiles defined.

Choose the operation you want to perform:
- NEW - Create a new domain profile.
- EDIT - Modify a domain profile.
- DELETE - Delete a domain profile.
- PRINT - Display domain profiles.
- LIST - List domain profiles.
- TEST - Test if a domain profile is ready to sign.
- DNSTXT - Generate a matching DNS TXT record.
- IMPORT - Import domain profiles from a file.
- EXPORT - Export domain profiles to a file.
- CLEAR - Clear all domain profiles.
[]>

Choose the operation you want to perform:
- SIGNING - Manage signing profiles.
- VERIFICATION - Manage verification profiles.
[]>

Number of DK/DKIM Signing Profiles: 1
Number of Signing Keys: 1
Number of DKIM Verification Profiles: 1
Sign System-Generated Messages: Yes

Choose the operation you want to perform:
- PROFILES - Manage domain profiles.
- KEYS - Manage signing keys.
- SETUP - Change global settings.
- SEARCH - Search for domain profile or key.
[]>

Creating a Sample Domain Keys DNS TXT Record

mail3.example.com> domainkeyconfig

Number of DK/DKIM Signing Profiles: 1
Number of Signing Keys: 1
Number of DKIM Verification Profiles: 1
Sign System-Generated Messages: Yes

Choose the operation you want to perform:
- PROFILES - Manage domain profiles.
- KEYS - Manage signing keys.
Domain Keys

- SETUP - Change global settings.
- SEARCH - Search for domain profile or key.

[] profiles

Choose the operation you want to perform:
- SIGNING - Manage signing profiles.
- VERIFICATION - Manage verification profiles.

[] signing

There are currently 1 domain profiles defined.

Choose the operation you want to perform:
- NEW - Create a new domain profile.
- EDIT - Modify a domain profile.
- DELETE - Delete a domain profile.
- PRINT - Display domain profiles.
- LIST - List domain profiles.
- TEST - Test if a domain profile is ready to sign.
- DNSTXT - Generate a matching DNS TXT record.
- IMPORT - Import domain profiles from a file.
- EXPORT - Export domain profiles to a file.
- CLEAR - Clear all domain profiles.

[] dnstxt

Enter the name or number of a domain profile.
1. Example

[1]>

The answers to the following questions will be used to construct DKIM text record for DNS. It can be used to publish information about this profile.

Do you wish to constrain the local part of the signing identities (["i=" tag of "DKIM-Signature" header field) associated with this domain profile? [N]>

Do you wish to include notes that may be of interest to a human (no interpretation is made by any program)? [N]>

The "testing mode" can be set to specify that this domain is testing DKIM and that unverified email must not be treated differently from verified email.

Do you want to indicate the "testing mode"? [N]>

Do you wish to disable signing by subdomains of this domain? [N]>

The DKIM DNS TXT record is:

test._domainkey.example.com. IN TXT "v=DKIM1;
p=MIGfMA0GCSqGSIb3DQEBAQUAA4GNADCBiQKBgQDX5dOG9J8rXreA/uPtYr51rCTCqR+q1S5Gm1fOOp1AzSuB2BvO
nxZ5wr+seOTk7yDP0FSYWyVawO+pCcun7fFRjS3EOFp9gLpb1dH5vz0CKp/w7hdyPy1q6p9gJTvQvQ6v89E8k5U17
C+DF6KvJUIJMSY5sru2zm9rKAH5m7FWfDAQAB;"

There are currently 1 domain profiles defined.

Choose the operation you want to perform:
- NEW - Create a new domain profile.
- EDIT - Modify a domain profile.
- DELETE - Delete a domain profile.
DMARC Verification

This section contains the following CLI commands:

- **dmarcconfig**

**dmarcconfig**

**Description**

Configure DMARC settings.

**Usage**

**Commit**: This command requires a ‘commit’.

**Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).

**Batch Command**: This command supports a batch format.

**Batch Format - DMARC Verification Profiles**

The batch format of the dmarcconfig can be used to create, edit, or delete verification profiles and modify global settings.
Add a DMARC Verification Profile

dmarcconfig profiles new <name> [options]

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;name&gt;</td>
<td>Name of the DMARC profile.</td>
</tr>
<tr>
<td>[options]</td>
<td></td>
</tr>
<tr>
<td>--rejectpolicy_action</td>
<td>The message action that AsyncOS must take when the policy in DMARC record is reject. Possible values are “reject”, “quarantine”, or “none.”</td>
</tr>
<tr>
<td>--rejectpolicy_response_code</td>
<td>The SMTP response code for rejected messages. The default value is 550.</td>
</tr>
<tr>
<td>--rejectpolicy_response_text</td>
<td>The SMTP response text for rejected messages. The default value is “#5.7.1 DMARC unauthenticated mail is prohibited.”</td>
</tr>
<tr>
<td>--quarantinepolicy_quarantine</td>
<td>The quarantine for messages that fail DMARC verification.</td>
</tr>
<tr>
<td>--quarantinepolicy_action</td>
<td>The message action that AsyncOS must take when the policy in DMARC record is quarantine. Possible values are “quarantine” or “none.”</td>
</tr>
<tr>
<td>--quarantinepolicy_quarantine</td>
<td>The quarantine for messages that fail DMARC verification.</td>
</tr>
<tr>
<td>--tempfail_action</td>
<td>The message action that AsyncOS must take on the messages that result in temporary failure during DMARC verification. Possible values are “accept” or “reject.”</td>
</tr>
<tr>
<td>--tempfail_response_code</td>
<td>The SMTP response code for rejected messages in case of temporary failure. The default value is 451.</td>
</tr>
<tr>
<td>--tempfail_response_text</td>
<td>The SMTP response text for rejected messages in case of temporary failure. The default value is “#4.7.1 Unable to perform DMARC verification.”</td>
</tr>
<tr>
<td>--permfail_action</td>
<td>The message action that AsyncOS must take on the messages that result in permanent failure during DMARC verification. Possible values are “accept” or “reject.”</td>
</tr>
<tr>
<td>--permfail_response_code</td>
<td>The SMTP response code for rejected messages in case of permanent failure. The default value is 550.</td>
</tr>
<tr>
<td>--permfail_response_text</td>
<td>The SMTP response text for rejected messages in case of permanent failure. The default value is “#5.7.1 DMARC verification failed.”</td>
</tr>
</tbody>
</table>

Edit a DMARC Verification Profile

dmarcconfig profiles edit <name> [options]

Delete a DMARC Verification Profile

dmarcconfig profiles delete <name>

Delete all the DMARC Verification Profiles

dmarcconfig profiles clear
View the Details of a DMARC Verification Profile

dmarcconfig profiles print <name>

Export DMARC Verification Profiles

dmarcconfig profiles export <filename>

Import DMARC Verification Profiles

dmarcconfig profiles import <filename>

Change Global Settings

dmarcconfig setup [options]

<table>
<thead>
<tr>
<th>Options</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--report_schedule</td>
<td>The time when you want AsyncOS to generate DMARC aggregate reports.</td>
</tr>
<tr>
<td>--error_reports</td>
<td>Send delivery error reports to the domain owners if the DMARC aggregate report size exceeds 10 MB or the size specified in the RUA tag of DMARC record.</td>
</tr>
<tr>
<td>--org_name</td>
<td>The entity generating DMARC aggregate reports. This must be a domain name.</td>
</tr>
<tr>
<td>--contact_info</td>
<td>Additional contact information, for example, details of your organization’s customer support, if the domain owners who receive DMARC aggregate reports want to contact the entity that generated the report.</td>
</tr>
<tr>
<td>--copy_reports</td>
<td>Send copy of all the DMARC aggregate reports to specific users, for example, internal users who perform analysis on the aggregate reports. Enter an email address or multiple addresses separated by commas.</td>
</tr>
<tr>
<td>--bypass_addresslist</td>
<td>Skip DMARC verification of messages from specific senders (address list). Note You can choose only address lists created with full email addresses.</td>
</tr>
<tr>
<td>--bypass_headers</td>
<td>Skip DMARC verification of messages that contain specific header field names. For example, use this option to skip DMARC verification of messages from mailing lists and trusted forwarders. Enter a header or multiple headers separated by commas.</td>
</tr>
</tbody>
</table>

Example

The following example shows how to setup a DMARC verification profile and edit the global settings of DMARC verification profiles.

mail.example.com> dmarcconfig

Number of DMARC Verification Profiles: 1
Daily report generation time is: 00:00
Error reports enabled: No
Reports sent on behalf of:
Contact details for reports:
Send a copy of aggregate reports to: None Specified
DMARC Verification

Choose the operation you want to perform:
- PROFILES - Manage DMARC verification profiles.
- SETUP - Change global settings.

There are currently 1 DMARC verification profiles defined.

Enter the name of the new DMARC verification profile:

Select the message action when the policy in DMARC record is reject:
1. No Action
2. Quarantine the message
3. Reject the message

Select the message action when the policy in DMARC record is quarantine:
1. No Action
2. Quarantine the message

Select the quarantine for messages that fail DMARC verification (when the DMARC policy is quarantine).
1. Policy

What SMTP action should be taken in case of temporary failure?
1. Accept
2. Reject

Enter the SMTP response code for rejected messages in case of temporary failure.

Enter the SMTP response text for rejected messages in case of temporary failure. Type DEFAULT to use the default response text '#4.7.1 Unable to perform DMARC verification.'

What SMTP action should be taken in case of permanent failure?
1. Accept
2. Reject

Enter the SMTP response code for rejected messages in case of permanent failure.

Enter the SMTP response text for rejected messages in case of permanent failure. Type DEFAULT to use the default response text '#4.7.1 Unable to perform DMARC verification.'
There are currently 2 DMARC verification profiles defined.

Choose the operation you want to perform:
- NEW - Create a new DMARC verification profile.
- EDIT - Modify a DMARC verification profile.
- DELETE - Delete a DMARC verification profile.
- PRINT - Display DMARC verification profiles.
- IMPORT - Import DMARC verification profiles from a file.
- EXPORT - Export DMARC verification profiles to a file.
- CLEAR - Clear all DMARC verification profiles.

Number of DMARC Verification Profiles: 2
Daily report generation time is: 00:00
Error reports enabled: No
Reports sent on behalf of:
Contact details for reports:
Send a copy of aggregate reports to: None Specified
Bypass DMARC verification for senders from addresslist: None Specified
Bypass DMARC verification for messages with header fields: None Specified

Choose the operation you want to perform:
- PROFILES - Manage DMARC verification profiles.
- SETUP - Change global settings.

Would you like to modify DMARC report settings? (Yes/No) [N]> y

Enter the time of day to generate aggregate feedback reports. Use 24-hour format (HH:MM).
[00:00]>

Would you like to send DMARC error reports? (Yes/No) [N]> y

Enter the entity name responsible for report generation. This is added to the DMARC aggregate reports.
[example.com]

Enter additional contact information to be added to DMARC aggregate reports. This could be an email address, URL of a website with additional help, a phone number etc.
[http://dmarc.example.com]

Would you like to send a copy of all aggregate reports? (Yes/No) [N]>

Would you like to bypass DMARC verification for an addresslist? (Yes/No) [N]>

Would you like to bypass DMARC verification for specific header fields? (Yes/No) [N]> y

Choose the operation you want to perform:
- ADD - Add a header field to the verification-bypass list.

Enter the header field name
[List-Unsubscribe]

DMARC verification is configured to bypass DMARC verification for messages containing the following header fields.
1. List-Unsubscribe

Choose the operation you want to perform:
- ADD - Add a header field to the verification-bypass list.
- REMOVE - Remove a header field from the list.
[>] add

Enter the header field name
[>] List-ID

DMARC verification is configured to bypass DMARC verification for messages containing the following header fields.
1. List-Unsubscribe
2. List-ID

Choose the operation you want to perform:
- ADD - Add a header field to the verification-bypass list.
- REMOVE - Remove a header field from the list.

Number of DMARC Verification Profiles: 2
Daily report generation time is: 00:00
Error reports enabled: Yes
Reports sent on behalf of: example.com
Contact details for reports: http://dmarc.example.com
Send a copy of aggregate reports to: None Specified
Bypass DMARC verification for senders from addresslist: None Specified
Bypass DMARC verification for messages with header fields: List-Unsubscribe, List-ID

Choose the operation you want to perform:
- PROFILES - Manage DMARC verification profiles.
- SETUP - Change global settings.

DNS

This section contains the following CLI commands:
- dig
- dnsconfig
- dnsflush
- dnshostprefs
- dnslistconfig
- dnslisttest
- dnsstatus

dig

Description

Look up a record on a DNS server

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command supports a batch format.

Batch Format

The batch format of the `dig` command can be used to perform all the functions of the traditional CLI command.

- Look up a record on a DNS server

  \[
  \text{dig [options] [@<dns_ip>] [qtype] <hostname>}
  \]

- Do a reverse lookup for given IP address on a DNS server

  \[
  \text{dig -x <reverse_ip> [options] [@<dns_ip>]}
  \]

These are the options available for the `dig` command’s batch format

- `s <source_ip>` Specify the source IP address.
- `-t` Make query over TCP.
- `-u` Make query over UDP (default).

\[
\text{dns_ip - Query the DNS server at this IP address.}
\]

\[
\text{qtype - Query type: A, PTR, CNAME, MX, SOA, NS, TXT.}
\]

\[
\text{hostname - Record that user want to look up.}
\]

\[
\text{reverse_ip - Reverse lookup IP address.}
\]

\[
\text{dns_ip - Query the DNS server at this IP address.}
\]

Example

The following example explicitly specifies a DNS server for the lookup.

\[
\text{mail.com> dig @111.111.111.111 example.com MX}
\]

\[
; <<< Dig 9.4.3-P2 >>> @111.111.111.111 example.com MX
; (1 server found)
;; global options: printcmd
;; Got answer:
;; ->>HEADER<<- opcode: QUERY, status: NOERROR, id: 18540
;; flags: qr aa rd ra; QUERY: 1, ANSWER: 1, AUTHORITY: 1, ADDITIONAL: 3

;; QUESTION SECTION:
@ example.com. IN MX

;; ANSWER SECTION:
The dig command filters out the information in the Authority and Additional sections if you do not explicitly specify the DNS server when using the command.

**dnsconfig**

**Description**

Configure DNS setup

**Usage**

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command supports a batch format.

**Batch Format**

The batch format of the `dnsconfig` command can be used to perform all the functions of the traditional CLI command.

- Configuring DNS to use a local nameserver cache:

  ```
  dnsconfig parent new <ns_ip> <priority>
  ```

  **Command arguments:**
  
  - `<ns_ip>` - The IP address of the nameserver. Separate multiple IP addresses with commas.
  - `<priority>` - The priority for this entry.

- Deleting the local nameserver cache:

  ```
  dnsconfig parent delete <ns_ip>
  ```

- Configuring alternate DNS caches to use for specific domains:

  ```
  dnsconfig alt new <domains> <ns_ip>
  ```
Note

Cannot be used when using Internet root nameservers.

Command arguments:
- `<ns_ip>` - The IP address of the nameserver. Separate multiple IP addresses with commas.
- `<domains>` - A comma separated list of domains.

• Deleting the alternate DNS cache for a specific domain:

  `dnsconfig alt delete <domain>`

• Configuring DNS to use the Internet root nameservers:

  `dnsconfig roots new <ns_domain> <ns_name> <ns_ip>`

Nameserver arguments:
- `<ns_domain>` - The domain to override.
- `<ns_name>` - The name of the nameserver.
- `<ns_ip>` - The IP address of the nameserver.

Note

You can override certain domains by specifying an alternate name server for that domain.

• Deleting nameservers:

  `dnsconfig roots delete <ns_domain> [ns_name]`

Note

When deleting, if you do not specify an `ns_name`, then all nameservers for that domain will be removed.

• Clearing all DNS settings and automatically configuring the system to use the Internet root servers:

  `dnsconfig roots`

Displaying the current DNS settings.

  `dnsconfig print`

Example

Each user-specified DNS server requires the following information:
- Hostname
- IP address
- Domain authoritative for (alternate servers only)
Four subcommands are available within the `dnsconfig` command:

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>new</code></td>
<td>Add a new alternate DNS server to use for specific domains or local DNS server.</td>
</tr>
<tr>
<td><code>delete</code></td>
<td>Remove an alternate server or local DNS server.</td>
</tr>
<tr>
<td><code>edit</code></td>
<td>Modify an alternate server or local DNS server.</td>
</tr>
<tr>
<td><code>setup</code></td>
<td>Switch between Internet root DNS servers or local DNS servers.</td>
</tr>
</tbody>
</table>

```
mail3.example.com> dnsconfig

Currently using the Internet root DNS servers.

Alternate authoritative DNS servers:
1. com: dns.example.com (10.1.10.9)

Choose the operation you want to perform:
- NEW - Add a new server.
- EDIT - Edit a server.
- DELETE - Remove a server.
- SETUP - Configure general settings.

[1]> setup

Do you want the Gateway to use the Internet's root DNS servers or would you like it to use your own DNS servers?
1. Use Internet root DNS servers
2. Use own DNS cache servers

[1]> 1

Choose the IP interface for DNS traffic.
1. Auto
2. Management (10.92.149.70/24: mail3.example.com)

[1]> 1

Enter the number of seconds to wait before timing out reverse DNS lookups.

[20]> 20

Enter the minimum TTL in seconds for DNS cache.

[1800]> 1800

Currently using the Internet root DNS servers.

Alternate authoritative DNS servers:
1. com: dns.example.com (10.1.10.9)

Choose the operation you want to perform:
- NEW - Add a new server.
- EDIT - Edit a server.
- DELETE - Remove a server.
- SETUP - Configure general settings.

[1]> 
```
Adding an Alternate DNS Server for Specific Domains

You can configure the appliance to use the Internet root servers for all DNS queries except specific local domains.

mail3.example.com> dnsconfig

Currently using the Internet root DNS servers.

No alternate authoritative servers configured.

Choose the operation you want to perform:
- NEW - Add a new server.
- SETUP - Configure general settings.

[>] new

Please enter the domain this server is authoritative for. (Ex: "com").
[>] example.com

Please enter the fully qualified hostname of the DNS server for the domain "example.com". (Ex: "dns.example.com").
[>] dns.example.com

Please enter the IP address of dns.example.com.
[>] 10.1.10.9

Currently using the Internet root DNS servers.

Alternate authoritative DNS servers:
1. com: dns.example.com (10.1.10.9)

Choose the operation you want to perform:
- NEW - Add a new server.
- EDIT - Edit a server.
- DELETE - Remove a server.
- SETUP - Configure general settings.

[>

Using Your Own DNS Cache Servers

You can configure the appliance to use your own DNS cache server.

mail3.example.com> dnsconfig

Currently using the Internet root DNS servers.

Alternate authoritative DNS servers:
1. com: dns.example.com (10.1.10.9)

Choose the operation you want to perform:
- NEW - Add a new server.
- EDIT - Edit a server.
- DELETE - Remove a server.
- SETUP - Configure general settings.

[>] setup

Do you want the Gateway to use the Internet's root DNS servers or would you like it to use your own DNS servers? 
1. Use Internet root DNS servers 
2. Use own DNS cache servers

[1]> 2
Please enter the IP address of your DNS server. Separate multiple IPs with commas.
{}> 10.10.200.03

Please enter the priority for 10.10.200.3. A value of 0 has the highest priority. The IP will be chosen at random if they have the same priority.
{}> 1

Choose the IP interface for DNS traffic.
1. Auto
2. Management (192.168.42.42/24)
3. PrivateNet (192.168.1.1/24: mail3.example.com)
4. PublicNet (192.168.2.1/24: mail3.example.com)
{}> 1

Enter the number of seconds to wait before timing out reverse DNS lookups.
{}> 20

Enter the minimum TTL in seconds for DNS cache.
{}> 1800

Currently using the local DNS cache servers:
1. Priority: 1 10.10.200.3

Choose the operation you want to perform:
- NEW - Add a new server.
- EDIT - Edit a server.
- DELETE - Remove a server.
- SETUP - Configure general settings.
{}>

**dnsflush**

**Description**

Clear all entries from the DNS cache.

**Usage**

**Commit**: This command does not require a ‘commit’.

**Cluster Management**: This command is restricted to machine mode.

**Batch Command**: This command does not support a batch format

**Example**

mail3.example.com> dnsflush
Are you sure you want to clear out the DNS cache? [N]> Y
dnshostprefs

Description

Configure IPv4/IPv6 DNS preferences

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format

Example

mail3.example.com> dnshostprefs

Choose the operation you want to perform:
- NEW - Add new domain override.
- SETDEFAULT - Set the default behavior.

[ ]> new

Enter the domain you wish to configure.
[ ]> example.com

How should the appliance sort IP addresses for this domain?
1. Prefer IPv4
2. Prefer IPv6
3. Require IPv4
4. Require IPv6
[2]> 3

Choose the operation you want to perform:
- NEW - Add new domain override.
- SETDEFAULT - Set the default behavior.

[ ]> setdefault

How should the appliance sort IP addresses?
1. Prefer IPv4
2. Prefer IPv6
3. Require IPv4
4. Require IPv6
[2]> 1

Choose the operation you want to perform:
- NEW - Add new domain override.
- SETDEFAULT - Set the default behavior.

[ ]>
**dnslistconfig**

**Description**

Configure DNS List services support

**Usage**

**Commit**: This command requires a ‘commit’.

**Cluster Management**: This command is restricted to machine mode.

**Batch Command**: This command does not support a batch format

**Example**

```
mail3.example.com> dnslistconfig

Current DNS List Settings:
Negative Response TTL: 1800 seconds
DNS List Query Timeout: 3 seconds

Choose the operation you want to perform:
- SETUP - Configure general settings.
[1]> setup

Enter the cache TTL for negative responses in seconds:
[1800]> 1200

Enter the query timeout in seconds:
[3]> 1200

Settings updated.

Current DNS List Settings:
Negative Response TTL: 1200 seconds
DNS List Query Timeout: 3 seconds

Choose the operation you want to perform:
- SETUP - Configure general settings.
[1]>
```

**dnslisttest**

**Description**

Test a DNS lookup for a DNS-based list service.

**Usage**

**Commit**: This command does not require a ‘commit’.

**Cluster Management**: This command is restricted to machine mode.

**Batch Command**: This command does not support a batch format
Example

mail3.example.com> dnslisttest

Enter the query server name:
[]> mail4.example.com

Enter the test IP address to query for:
[127.0.0.2]> 10.10.1.11

Querying: 10.10.1.11.mail4.example.com
Result: MATCHED

dnsstatus

Description

Display DNS statistics.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail3.example.com> dnsstatus

Status as of: Mon Apr 18 10:58:07 2005 PDT

<table>
<thead>
<tr>
<th>Counters</th>
<th>Reset</th>
<th>Uptime</th>
<th>Lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNS Requests</td>
<td>1,115</td>
<td>1,115</td>
<td>1,115</td>
</tr>
<tr>
<td>Network Requests</td>
<td>186</td>
<td>186</td>
<td>186</td>
</tr>
<tr>
<td>Cache Hits</td>
<td>1,300</td>
<td>1,300</td>
<td>1,300</td>
</tr>
<tr>
<td>Cache Misses</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Cache Exceptions</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Cache Expired</td>
<td>185</td>
<td>185</td>
<td>185</td>
</tr>
</tbody>
</table>

General Management/Administration/Troubleshooting

This section contains the following CLI commands:

- addressconfig
- adminaccessconfig
- certconfig
- date
- diagnostic
- diskquotaconfig
- ecconfig
- ecstatus
- ecupdate
- encryptionconfig
- encryptionstatus
- encryptionupdate
- featurekey
- featurekeyconfig
- fipsconfig
- generalconfig
- healthcheck
- healthconfig
- ntpconfig
- reboot
- repengstatus
- repengstatus
- resume
- resumedelta
- resumelistener
- revert
- settime
- settz
- shutdown
- sshconfig
- status
- supportrequest
- supportrequeststatus
- supportrequestupdate
- suspend
- suspenddelta
- suspendlistener
- tcpservices
- techsupport
- tlsverify
- trace
- trackingconfig
- updateconfig
- updatenow
addressconfig

Description

The `addressconfig` command is used to configure the From: Address header. You can specify the display, user, and domain names of the From: address. You can also choose to use the Virtual Gateway domain for the domain name. Use the addressconfig command for mail generated by AsyncOS for the following circumstances:

- Anti-virus notifications
- Bounces
- DMARC feedback reports
- Notifications (notify() and notify-copy() filter actions)
- Quarantine Messages (and “Send Copy” in quarantine management)
- Reports
- All other messages

In the following example, the From: Address for notifications is changed from: Mail Delivery System [MAILER-DAEMON@domain] (the default) to Notifications [Notification@example.com]

Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> addressconfig

Current anti-virus from: "Mail Delivery System" <MAILER-DAEMON@domain>
Current bounce from: "Mail Delivery System" <MAILER-DAEMON@domain>
Current notify from: "Mail Delivery System" <MAILER-DAEMON@domain>
Current quarantine from: "Mail Delivery System" <MAILER-DAEMON@domain>
Current DMARC reports from: "DMARC Feedback" <MAILER-DAEMON@domain>
Current all other messages from: "Mail Delivery System" <MAILER-DAEMON@domain>

Choose the operation you want to perform:
- AVFROM - Edit the anti-virus from address.
- BOUNCEFROM - Edit the bounce from address.
- NOTIFYFROM - Edit the notify from address.
- QUARANTINEFROM - Edit the quarantine bcc from address.
- DMARCFROM - Edit the DMARC reports from address.
- OTHERFROM - Edit the all other messages from address.
```
[]> notifyfrom
Please enter the display name portion of the "notify from" address
["Mail Delivery System"]> Notifications
Please enter the user name portion of the "notify from" address
[MAILER-DAEMON]> Notification
Do you want the virtual gateway domain used for the domain? [Y]> n
Please enter the domain name portion of the "notify from" address
[]> example.com
Current anti-virus from: "Mail Delivery System" <MAILER-DAEMON@domain>
Current bounce from: "Mail Delivery System" <MAILER-DAEMON@domain>
Current notify from: Notifications <Notification@example.com>
Current quarantine from: "Mail Delivery System" <MAILER-DAEMON@domain>
Current DMARC reports from: "DMARC Feedback" <MAILER-DAEMON@domain>
Current all other messages from: "Mail Delivery System" <MAILER-DAEMON@domain>

Choose the operation you want to perform:
- AVFROM - Edit the anti-virus from address.
- BOUNCEFROM - Edit the bounce from address.
- NOTIFYFROM - Edit the notify from address.
- QUARANTINEFROM - Edit the quarantine bcc from address.
- DMARCFROM - Edit the DMARC reports from address.
- OTHERFROM - Edit the all other messages from address.
[]>

adminaccessconfig

Description

Use the adminaccessconfig command to configure:
- Login message (banner) for the administrator.
- IP-based access for appliance administrative interface.
- Web interface Cross-Site Request Forgeries protection.
- Option to use host header in HTTP requests.
- Web interface and CLI session inactivity timeout.

Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command supports a batch format.

Batch Format

The batch format of the adminaccessconfig command can be used to perform all the functions of the traditional CLI command.
• Select whether to allow access for all IP addresses or limit access to specific IP address/subnet/range
  
  `adminaccessconfig ipaccess <all/restrict/proxyonly/proxy>`

• Adding a new IP address/subnet/range
  
  `adminaccessconfig ipaccess new <address>`

• Editing an existing IP address/subnet/range
  
  `adminaccessconfig ipaccess edit <oldaddress> <newaddress>`

• Deleting an existing IP address/subnet/range
  
  `adminaccessconfig ipaccess delete <address>`

• Printing a list of the IP addresses/subnets/ranges
  
  `adminaccessconfig ipaccess print`

• Deleting all existing IP addresses/subnets/ranges
  
  `adminaccessconfig ipaccess clear`

• Printing the login banner
  
  `adminaccessconfig banner print`

• Importing a login banner from a file on the appliance
  
  `adminaccessconfig banner import <filename>`

• Deleting an existing login banner
  
  `adminaccessconfig banner clear`

• Printing the welcome banner
  
  `adminaccessconfig welcome print`

• Importing a welcome banner from a file on the appliance
  
  `adminaccessconfig welcome import <filename>`
• Deleting an existing welcome banner
  
  `adminaccessconfig welcome clear`

• Exporting a welcome banner
  
  `adminaccessconfig welcome export <filename>`

• Add an allowed proxy IP address
  
  `adminaccessconfig ipaccess proxylist new <address>`

• Edit an allowed proxy IP address
  
  `adminaccessconfig ipaccess proxylist edit <oldaddress> <newaddress>`

• Delete an allowed proxy IP address
  
  `adminaccessconfig ipaccess proxylist delete <address>`

• Delete all existing allowed proxy IP addresses
  
  `adminaccessconfig ipaccess proxylist clear`

• Configure the header name that contains origin IP address
  
  `adminaccessconfig ipaccess proxy-header <header name>`

• Enable or disable web interface Cross-Site Request Forgeries protection
  
  `adminaccessconfig csrf <enable|disable>`

• Check whether web interface Cross-Site Request Forgeries protection is enabled
  
  `adminaccessconfig csrf print`

• Configure web interface session timeout
  
  `adminaccessconfig timeout gui <value>`

• Configure CLI session timeout
  
  `adminaccessconfig timeout gui <value>`
Example - Configuring Network Access List

You can control from which IP addresses users access the Email Security appliance. Users can access the appliance from any machine with an IP address from the access list you define. When creating the network access list, you can specify IP addresses, subnets, or CIDR addresses.

AsyncOS displays a warning if you do not include the IP address of your current machine in the network access list. If your current machine’s IP address is not in the list, it will not be able to access the appliance after you commit your changes.

In the following example, network access to the appliance is restricted to two sets of IP addresses:

```
mail.example.com> adminaccessconfig
Choose the operation you want to perform:
- BANNER - Configure login message (banner) for appliance administrator login.
- WELCOME - Configure welcome message (post login message) for appliance administrator login.
- IPACCESS - Configure IP-based access for appliance administrative interface.
- CSRF - Configure web UI Cross-Site Request Forgeries protection.
- HOSTHEADER - Configure option to use host header in HTTP requests.
- TIMEOUT - Configure GUI and CLI session inactivity timeout.
[]> ipaccess
Current mode: Allow All.
Please select the mode:
- ALL - All IP addresses will be allowed to access the administrative interface.
- RESTRICT - Specify IP addresses/Subnets/Ranges to be allowed access.
- PROXYONLY - Specify IP addresses/Subnets/Ranges to be allowed access through proxy.
- PROXY - Specify IP addresses/Subnets/Ranges to be allowed access through proxy or directly.
[]> restrict
List of allowed IP addresses/Subnets/Ranges:

Choose the operation you want to perform:
- NEW - Add a new IP address/subnet/range.
[]> new
Please enter IP address, subnet or range.
[]> 192.168.1.2-100
List of allowed IP addresses/Subnets/Ranges:
1.  192.168.1.2-100

Choose the operation you want to perform:
- NEW - Add a new IP address/subnet/range.
- EDIT - Modify an existing entry.
- DELETE - Remove an existing entry.
- CLEAR - Remove all the entries.
[]> new
Please enter IP address, subnet or range.
[]> 192.168.255.12
List of allowed IP addresses/Subnets/Ranges:
1.  192.168.1.2-100
1.  192.168.255.12
2. 192.168.255.12

Choose the operation you want to perform:
- NEW - Add a new IP address/subnet/range.
- EDIT - Modify an existing entry.
- DELETE - Remove an existing entry.
- CLEAR - Remove all the entries.

Warning: The host you are currently using [72.163.202.175] is not included in the User Access list. Excluding it will prevent your host from connecting to the administrative interface. Are you sure you want to continue? [N]> Y

Current mode: Restrict.
Please select the mode:
- ALL - All IP addresses will be allowed to access the administrative interface.
- RESTRICT - Specify IP addresses/Subnets/Ranges to be allowed access.
- PROXYONLY - Specify IP addresses/Subnets/Ranges to be allowed access through proxy.
- PROXY - Specify IP addresses/Subnets/Ranges to be allowed access through proxy or directly.

Example - Configuring Login Banner

You can configure the Email Security appliance to display a message called a “login banner” when a user attempts to log into the appliance through SSH, Telnet, FTP, or Web UI. The login banner is customizable text that appears above the login prompt in the CLI and to the right of the login prompt in the GUI. You can use the login banner to display internal security information or best practice instructions for the appliance. For example, you can create a simple note that saying that unauthorized use of the appliance is prohibited or a detailed warning concerning the organization’s right to review changes made by the user to the appliance.

The maximum length of the login banner is 2000 characters to fit 80x25 consoles. A login banner can be imported from a file in the /data/pub/configuration directory on the appliance. After creating the banner, commit your changes.

In the following example, the login banner “Use of this system in an unauthorized manner is prohibited” is added to the appliance:

```
mail.example.com> adminaccessconfig
Choose the operation you want to perform:
- BANNER - Configure login message (banner) for appliance administrator login.
- WELCOME - Configure welcome message (post login message) for appliance administrator login.
- IPACCESS - Configure IP-based access for appliance administrative interface.
- CSRF - Configure web UI Cross-Site Request Forgeries protection.
- HOSTHEADER - Configure option to use host header in HTTP requests.
- TIMEOUT - Configure GUI and CLI session inactivity timeout.

[>] banner
A banner has not been defined.

Choose the operation you want to perform:
- NEW - Create a banner to display at login.
- IMPORT - Import banner text from a file.

[>] new
```

Enter or paste the banner text here. Enter CTRL-D on a blank line to end. Use of this system in an unauthorized manner is prohibited.
Choose the operation you want to perform:
- BANNER - Configure login message (banner) for appliance administrator login.
- WELCOME - Configure welcome message (post login message) for appliance administrator login.
- IPACCESS - Configure IP-based access for appliance administrative interface.
- CSRF - Configure web UI Cross-Site Request Forgeries protection.
- HOSTHEADER - Configure option to use host header in HTTP requests.
- TIMEOUT - Configure GUI and CLI session inactivity timeout.

[]> banner

Banner: Use of this system in an unauthorized manner is prohibited.

Choose the operation you want to perform:
- NEW - Create a banner to display at login.
- IMPORT - Import banner text from a file.
- DELETE - Remove the banner.

[]>

**Example - Configuring Web Interface and CLI Session Timeout**

The following example sets the web interface and CLI session timeout to 32 minutes.

*Note* The CLI session timeout applies only to the connections using Secure Shell (SSH), SCP, and direct serial connection. Any uncommitted configuration changes at the time of CLI session timeout will be lost. Make sure that you commit the configuration changes as soon as they are made.

mail.example.com> adminaccessconfig

Choose the operation you want to perform:
- BANNER - Configure login message (banner) for appliance administrator login.
- WELCOME - Configure welcome message (post login message) for appliance administrator login.
- IPACCESS - Configure IP-based access for appliance administrative interface.
- CSRF - Configure web UI Cross-Site Request Forgeries protection.
- HOSTHEADER - Configure option to use host header in HTTP requests.
- TIMEOUT - Configure GUI and CLI session inactivity timeout.

[]> timeout

Enter WebUI inactivity timeout (in minutes):
[30]> 32

Enter CLI inactivity timeout (in minutes):
[30]> 32

Choose the operation you want to perform:
- BANNER - Configure login message (banner) for appliance administrator login.
- WELCOME - Configure welcome message (post login message) for appliance administrator login.
- IPACCESS - Configure IP-based access for appliance administrative interface.
- CSRF - Configure web UI Cross-Site Request Forgeries protection.
- HOSTHEADER - Configure option to use host header in HTTP requests.
- TIMEOUT - Configure GUI and CLI session inactivity timeout.

[]> mail.example.com> commit

Please enter some comments describing your changes:
After committing the changes, the new CLI session timeout takes affect only during the subsequent login.

### certconfig

**Description**

Configure security certificates and keys.

**Usage**

- **Commit**: This command requires a ‘commit’.
- **Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).
- **Batch Command**: This command does not support a batch format.

**Example - Pasting in a certificate**

In the following example, a certificate is installed by pasting in the certificate and private key.

```
mail3.example.com> certconfig
```

Choose the operation you want to perform:
- **CERTIFICATE** - Import, Create a request, Edit or Remove Certificate Profiles
- **CERTAUTHORITY** - Manage System and Customized Authorities
- **CRL** - Manage Certificate Revocation Lists

```
[]> certificate
```

List of Certificates

<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name</th>
<th>Issued By</th>
<th>Status</th>
<th>Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demo</td>
<td>Cisco Appliance Demo</td>
<td>Cisco Appliance Demo</td>
<td>Active</td>
<td>3467 days</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- **IMPORT** - Import a certificate from a local PKCS#12 file
- **PASTE** - Paste a certificate into the CLI
- **NEW** - Create a self-signed certificate and CSR
- **PRINT** - View certificates assigned to services

```
[]> paste
```

Enter a name for this certificate profile:

```
> partner.com
```

Paste public certificate in PEM format (end with '.'):  

```
-----BEGIN CERTIFICATE-----
MIICLDCCAdYCAQAwDQYJKoZIhvcNAQEEBQAwgaAxCzAJBgNVBAYTAlBUMRMwEQYD
VQQIEwpRdWVlbnNsYW5kMQ8wDQYDVQQHEwZMaXNib2ExFzAVBgNVBAoTDk5ldXJv
bmlvLCBMZGEuMRgwFgYDVQQLEw9EZXNlbnZvbHZpb3ludCAxGzAZBgNVBAMTEmJy
dXR1cy5uZXVyb25pby5wdDEbMBkGCSqGSIb3DQEJARYMtc2FtcG9AaWtpLmZpMB4X
```

```
-----END CERTIFICATE-----
```
Chapter 3      The Commands: Reference Examples

General Management/Administration/Troubleshooting

Do you want to add an intermediate certificate? [N]> n

List of Certificates

<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name</th>
<th>Issued By</th>
<th>Status</th>
<th>Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>partner.c</td>
<td>brutus.partner.com</td>
<td>brutus.partner</td>
<td>Active</td>
<td>30 days</td>
</tr>
<tr>
<td>Demo</td>
<td>Cisco Appliance Demo</td>
<td>Cisco Appliance Demo</td>
<td>Active</td>
<td>3467 days</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- IMPORT - Import a certificate from a local PKCS#12 file
- PASTE - Paste a certificate into the CLI
- NEW - Create a self-signed certificate and CSR
- EDIT - Update certificate or view the signing request
- EXPORT - Export a certificate
- DELETE - Remove a certificate
- PRINT - View certificates assigned to services

Choose the operation you want to perform:
- CERTIFICATE - Import, Create a request, Edit or Remove Certificate Profiles
- CERTAUTHORITY - Manage System and Customized Authorities
- CRL - Manage Certificate Revocation Lists

Example - Creating a Self-signed Certificate

In the following example, a self-signed certificate is created.
mail3.example.com> certconfig

Choose the operation you want to perform:
- CERTIFICATE - Import, Create a request, Edit or Remove Certificate Profiles
- CERTAUTHORITY - Manage System and Customized Authorities
- CRL - Manage Certificate Revocation Lists

[>] certificate

List of Certificates

<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name</th>
<th>Issued By</th>
<th>Status</th>
<th>Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>partner.c</td>
<td>brutus.neuronio.pt</td>
<td>brutus.neuronio.pt</td>
<td>Expired</td>
<td>-4930 days</td>
</tr>
<tr>
<td>Demo</td>
<td>Cisco Appliance Demo</td>
<td>Cisco Appliance Demo</td>
<td>Active</td>
<td>3467 days</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- IMPORT - Import a certificate from a local PKCS#12 file
- PASTE - Paste a certificate into the CLI
- NEW - Create a self-signed certificate and CSR
- EDIT - Update certificate or view the signing request
- EXPORT - Export a certificate
- DELETE - Remove a certificate
- PRINT - View certificates assigned to services

[>] new

1. Create a self-signed certificate and CSR
2. Create a self-signed SMIME certificate and CSR

[1]> 1

Enter a name for this certificate profile:
> example.com

Enter Common Name:
> example.com

Enter Organization:
> Example

Enter Organizational Unit:
> Org

Enter Locality or City:
> San Francisco

Enter State or Province:
> CA

Enter Country (2 letter code):
> US

Duration before expiration (in days):
[3650]>

1. 1024
2. 2048

Enter size of private key:
[2]>

Do you want to view the CSR? [Y] > y

-----BEGIN CERTIFICATE REQUEST-----
MIICrTCCAUCAwQAwgDELMAkGA1UEBhMCVMxNDBASBgNVBAMTC2V4YW1wbGUuY29t
Example - Create a Self-signed S/MIME Signing Certificate

The following example shows how to create a self-signed S/MIME certificate for signing messages.

```
vm10esa0031.qa> certconfig
Choose the operation you want to perform:
- CERTIFICATE - Import, Create a request, Edit or Remove Certificate Profiles
- CERTAUTHORITY - Manage System and Customized Authorities
- CRL - Manage Certificate Revocation Lists
[>] certificate
Choose the operation you want to perform:
- IMPORT - Import a certificate from a local PKCS#12 file
- PASTE - Paste a certificate into the CLI
- NEW - Create a self-signed certificate and CSR
- EDIT - Update certificate or view the signing request
- EXPORT - Export a certificate
- DELETE - Remove a certificate
- PRINT - View certificates assigned to services
[>] new
```

```
Choose the operation you want to perform:
- CERTIFICATE - Import, Create a request, Edit or Remove Certificate Profiles
- CERTAUTHORITY - Manage System and Customized Authorities
- CRL - Manage Certificate Revocation Lists
[>] certificate
Choose the operation you want to perform:
- IMPORT - Import a certificate from a local PKCS#12 file
- PASTE - Paste a certificate into the CLI
- NEW - Create a self-signed certificate and CSR
- PRINT - View certificates assigned to services
[>] new
```

```
Choose the operation you want to perform:
- IMPORT - Import a certificate from a local PKCS#12 file
- PASTE - Paste a certificate into the CLI
- NEW - Create a self-signed certificate and CSR
- PRINT - View certificates assigned to services
[>] new
```

1. Create a self-signed certificate and CSR
2. Create a self-signed SMIME certificate and CSR

Enter a name for this certificate profile:

-----END CERTIFICATE REQUEST-----

<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name</th>
<th>Issued By</th>
<th>Status</th>
<th>Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>example.c</td>
<td>example.com</td>
<td>example.com</td>
<td>Valid</td>
<td>3649 days</td>
</tr>
<tr>
<td>partner.c</td>
<td>brutus.partner.com</td>
<td>brutus.partner.com</td>
<td>Valid 30 days</td>
<td></td>
</tr>
<tr>
<td>Demo</td>
<td>Cisco Appliance Demo</td>
<td>Cisco Appliance Demo</td>
<td>Active</td>
<td>3467 days</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- IMPORT - Import a certificate from a local PKCS#12 file
- PASTE - Paste a certificate into the CLI
- NEW - Create a self-signed certificate and CSR
- EDIT - Update certificate or view the signing request
- EXPORT - Export a certificate
- DELETE - Remove a certificate
- PRINT - View certificates assigned to services

[>]
> smime_signing

Enter Common Name:
> CN

Enter Organization:
> ORG

Enter Organizational Unit:
> OU

Enter Locality or City:
> BN

Enter State or Province:
> KA

Enter Country (2 letter code):
> IN

Duration before expiration (in days):
[3650]>
1. 1024
2. 2048
Enter size of private key:
[2]> 1024

Enter email address for 'subjectAltName' extension:
[ ]> admin@example.com

Add another member? [Y] > n

Begin entering domain entries for 'subjectAltName'.

Enter the DNS you want to add.
[ ]> domain.com

Add another member? [Y] > n

Do you want to view the CSR? [Y] > n

List of Certificates

<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name</th>
<th>Issued By</th>
<th>Status</th>
<th>Remaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>smime_sig</td>
<td>CN</td>
<td>CN</td>
<td>Valid</td>
<td>3649 days</td>
</tr>
<tr>
<td>Demo</td>
<td>Cisco Appliance Demo</td>
<td>Cisco Appliance Demo</td>
<td>Active</td>
<td>3329 days</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- IMPORT - Import a certificate from a local PKCS#12 file
- PASTE - Paste a certificate into the CLI
- NEW - Create a self-signed certificate and CSR
- EDIT - Update certificate or view the signing request
- EXPORT - Export a certificate
- DELETE - Remove a certificate
- PRINT - View certificates assigned to services
[ ]>
date

Description
Displays the current date and time

Usage
Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

mail.example.com> date
Tue Mar 10 11:30:21 2015 GMT

diagnostic

Description
Use the diagnostic command to:

- Troubleshoot hardware and network issues using various utilities
- Check the RAID status
- Display ARP cache
- Clear LDAP, DNS, and ARP caches
- Send SMTP test messages

Using the diagnostic Command

The following commands are available within the diagnostic submenu:

<table>
<thead>
<tr>
<th>Option</th>
<th>Sub Commands</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>RAID</td>
<td>1. Run disk verify</td>
<td>Available on C30 and C60 only.</td>
</tr>
<tr>
<td></td>
<td>2. Monitor tasks in progress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Display disk verify verdict</td>
<td></td>
</tr>
<tr>
<td>DISK_USAGE</td>
<td>No Sub Commands</td>
<td>This command has been deprecated. Instead, use the diskquotaconfig command.</td>
</tr>
</tbody>
</table>

|     |                                     |                                                  |
**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.

**Batch Command:** This command supports a batch format.

**Batch Format**

The batch format of the diagnostic command can be used to check RAID status, clear caches and show the contents of the ARP cache. To invoke as a batch command, use the following formats:

Use the batch format to perform the following operations:

- Check the RAID status
  
  `diagnostic raid`

- Show the contents of the ARP cache
  
  `diagnostic network arpshow`

- Show the contents of the NDP cache
  
  `diagnostic network ndpshow`

- Clear the LDAP, DNS, ARP and NDP caches
  
  `diagnostic network flush`

---

### Table 3-5  
**diagnostic Subcommands (Continued)**

<table>
<thead>
<tr>
<th>Option</th>
<th>Sub Commands</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>NETWORK</td>
<td>FLUSH</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td></td>
<td>ARPSHOW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SMTPPING</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TCPDUMP</td>
<td></td>
</tr>
<tr>
<td>REPORTING</td>
<td>DELETEDB</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td></td>
<td>DISABLE</td>
<td></td>
</tr>
<tr>
<td>TRACKING</td>
<td>DELETEDB</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td></td>
<td>DEBUG</td>
<td></td>
</tr>
<tr>
<td>RELoad</td>
<td>No Sub Commands</td>
<td>C-, X-, and M-Series</td>
</tr>
</tbody>
</table>
• Reset and delete the reporting database

diagnostic reporting deletedb

• Enable reporting daemons

diagnostic reporting enable

• Disable reporting daemons

diagnostic reporting disable

• Reset and delete the tracking database

diagnostic tracking deletedb

• Reset configuration to the initial manufacturer values

diagnostic reload

Example: Displaying and Clearing Caches

The following example shows the diagnostic command used to display the contents of the ARP cache and to flush all network related caches.

mail.example.com> diagnostic

Choose the operation you want to perform:
- RAID - Disk Verify Utility.
- DISK_USAGE - Check Disk Usage.
- NETWORK - Network Utilities.
- REPORTING - Reporting Utilities.
- TRACKING - Tracking Utilities.
- RELOAD - Reset configuration to the initial manufacturer values.

[]> network

Choose the operation you want to perform:
- FLUSH - Flush all network related caches.
- ARPSHOW - Show system ARP cache.
- NDPSHOW - Show system NDP cache.
- SMTPPING - Test a remote SMTP server.
- TCPDUMP - Dump ethernet packets.

[]> arpshow

System ARP cache contents:

(10.76.69.3) at 00:1e:bd:28:97:00 on em0 expires in 1193 seconds [ethernet]
(10.76.69.2) at 00:1e:79:af:f4:00 on em0 expires in 1192 seconds [ethernet]
(10.76.69.1) at 00:00:0c:9f:f0:01 on em0 expires in 687 seconds [ethernet]
(10.76.69.149) at 00:50:56:b2:0e:2b on em0 permanent [ethernet]

Choose the operation you want to perform:
- FLUSH - Flush all network related caches.
Example: Verify Connectivity to Another Mail Server

The following example shows diagnostics used to check connectivity to another mail server. You can test the mail server by sending a message or pinging the server.

cmail.example.com> diagnostic

Choose the operation you want to perform:
  • RAID - Disk Verify Utility.
  • NETWORK - Network Utilities.
  • REPORTING - Reporting Utilities.
  • TRACKING - Tracking Utilities.
  • RELOAD - Reset configuration to the initial manufacturer values.

[>] network

Choose the operation you want to perform:
  • FLUSH - Flush all network related caches.
  • ARPSHOW - Show system ARP cache.
  • NDPSHOW - Show system NDP cache.
  • SMTPPING - Test a remote SMTP server.
  • TCPDUMP - Dump ethernet packets.

[>] smtpping

Enter the hostname or IP address of the SMTP server:
cmail.example.com> mail.com

The domain you entered has MX records.
Would you like to select an MX host to test instead? [Y]>

Select an MX host to test.
1. mx00.gmx.com
2. mx01.gmx.com
[1]>

Select a network interface to use for the test.
1. Management
2. auto
[2]>

Do you want to type in a test message to send? If not, the connection will be tested but no email will be sent. [N]>
Starting SMTP test of host mx00.gmx.com.
Resolved 'mx00.gmx.com' to 74.208.5.4.
Unable to connect to 74.208.5.4.

Example: Reset Appliance Configuration to the Initial Manufacturer Values

The following example shows how to reset your appliance configuration to the initial manufacturer values.

```
mail.example.com> diagnostic
```

Choose the operation you want to perform:
- RAID - Disk Verify Utility.
- NETWORK - Network Utilities.
- REPORTING - Reporting Utilities.
- TRACKING - Tracking Utilities.
- RELOAD - Reset configuration to the initial manufacturer values.

```
[]> reload
```

This command will remove all user settings and reset the entire device.

If this is a Virtual Appliance, all feature keys will be removed, and the license must be reapplied.
Are you sure you want to continue? [N]> Y
Are you *really* sure you want to continue? [N]> Y
Do you want to wipe also? [N]> Y

diskquotaconfig

View or configure disk space allocation for reporting and tracking, quarantines, log files, packet captures, and configuration files.

See User Guide for AsyncOS for Cisco Email Security Appliances for complete information about this feature.

Usage

**Commit**: This command requires a ‘commit’.

**Cluster Management**: This command is restricted to machine mode.

**Batch Command**: This command supports a batch format.

**Batch Format**

```
diskquotaconfig <feature> <quota> [[<feature> <quota> [<feature> <quota><feature> <quota>]]]]
```

Valid values for `<feature>` are euq, pvo, tracking, reporting

Valid values for `<quota>` are integers.
Example

```
mail.example.com> diskquotaconfig

Service                                      Disk Usage(GB)  Quota(GB)
---------------------------------------------------------------------------
Spam Quarantine (EUQ)                         1                1
Policy, Virus & Outbreak Quarantines         1                3
Reporting                                    5                10
Tracking                                     1                10
Miscellaneous Files                          5                30
System Files Usage : 5 GB                    
User Files Usage : 0 GB                      
Total                                        13               54 of 143

Choose the operation you want to perform:
- EDIT - Edit disk quotas
[1]> edit

Enter the number of the service for which you would like to edit disk quota:
1. Spam Quarantine (EUQ)
2. Policy, Virus & Outbreak Quarantines
3. Reporting
4. Tracking
5. Miscellaneous Files
[1]> 1

Enter the new disk quota -
[1]> 1

Disk quota for Spam Quarantine (EUQ) changed to 1

Service                                      Disk Usage(GB)  Quota(GB)
---------------------------------------------------------------------------
Spam Quarantine (EUQ)                         1                1
Policy, Virus & Outbreak Quarantines         1                3
Reporting                                    5                10
Tracking                                     1                10
Miscellaneous Files                          5                30
System Files Usage : 5 GB                    
User Files Usage : 0 GB                      
Total                                        13               54 of 143

Choose the operation you want to perform:
- EDIT - Edit disk quotas
[1]>
```

ecconfig

Set or clear the enrollment client that is used to obtain certificates for use with the URL Filtering feature.

Do not use this command without guidance from Cisco support.

Entries must be in the format `<hostname:port>` or `<IPv4 address:port>`. Port is optional.

To specify the default server, enter `ecconfig server default`.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used at all levels in a cluster.

Batch Command: This command supports a batch format.

**Batch Format**

- To specify a non-default enrollment client server:
  
  > `ecconfig server <server_name:port>`

To use the default enrollment client server:

> `ecconfig server default`

**Example**

```
mail.example.com> ecconfig
Enrollment Server: Not Configured (Use Default)
Choose the operation you want to perform:
  - SETUP - Configure the Enrollment Server
[]> setup
Do you want to use non-default Enrollment server? WARNING: Do not configure this option without the assistance of Cisco Support. Incorrect configuration can impact the services using certificates from the Enrollment server. [N]> y
[]> 192.0.2.1
Choose the operation you want to perform:
  - SETUP - Configure the Enrollment Server
[]>
```

**ecstatus**

Display the current version of the enrollment client that is used to automatically obtain certificates for use with the URL Filtering feature.

**Usage**

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode.

Batch Command: This command does not support a batch format.

**Example**

```
mail.example.com> ecstatus
Component             Version    Last Updated
Enrollment Client     1.0.2-046  Never updated
```
ecupdate

Manually update the enrollment client that is used to automatically obtain certificates for use with the URL Filtering feature. Normally, these updates occur automatically. Do not use this command without guidance from Cisco support.

If you use the `force` parameter (`ecupdate [force]`) the client is updated even if no changes are detected.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command supports a batch format.

**Batch Format**

```
> ecupdate [force]
```

**Example**

```
mail.example.com> ecupdate
Requesting update of Enrollment Client.
```

encryptionconfig

Configure email encryption.

**Usage**

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format

**Example**

The following example shows modifications to an encryption profile:

```
mail.example.com> encryptionconfig
IronPort Email Encryption: Enabled
Choose the operation you want to perform:
- SETUP - Enable/Disable IronPort Email Encryption
- PROFILES - Configure email encryption profiles
- PROVISION - Provision with the Cisco Registered Envelope Service
[]> setup
PXE Email Encryption: Enabled
Would you like to use PXE Email Encryption? [Y]>
```
WARNING: Increasing the default maximum message size (10MB) may result in decreased performance. Please consult documentation for size recommendations based on your environment.

Maximum message size for encryption: (Add a trailing K for kilobytes, M for megabytes, or no letters for bytes.)

[10M]>

Enter the email address of the encryption account administrator
[administrator@example.com]>

IronPort Email Encryption: Enabled

Choose the operation you want to perform:
- SETUP - Enable/Disable IronPort Email Encryption
- PROFILES - Configure email encryption profiles
- PROVISION - Provision with the Cisco Registered Envelope Service

profiles

Proxy: Not Configured

<table>
<thead>
<tr>
<th>Profile Name</th>
<th>Key Service</th>
<th>Proxied</th>
<th>Provision Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIPAA</td>
<td>Hosted Service</td>
<td>No</td>
<td>Not Provisioned</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- NEW - Create a new encryption profile
- EDIT - Edit an existing encryption profile
- DELETE - Delete an encryption profile
- PRINT - Print all configuration profiles
- CLEAR - Clear all configuration profiles
- PROXY - Configure a key server proxy

edit

1. HIPAA

Select the profile you wish to edit:
[1] > 1

Profile name: HIPAA
External URL: https://res.cisco.com
Encryption algorithm: ARC4
Payload Transport URL: http://res.cisco.com
Envelope Security: High Security
Return receipts enabled: Yes
Secure Forward enabled: No
Secure Reply All enabled: No
Suppress Applet: No
URL associated with logo image: <undefined>
Encryption queue timeout: 14400
Failure notification subject: [ENCRYPTION FAILURE]
Failure notification template: System Generated
Filename for the envelope: securedoc_${date}T${time}.html
Use Localized Envelope: No
Text notification template: System Generated
HTML notification template: System Generated

Choose the operation you want to perform:
- NAME - Change profile name
- EXTERNAL - Change external URL
- ALGORITHM - Change encryption algorithm
- PAYLOAD - Change the payload transport URL
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- SECURITY - Change envelope security
- RECEIPT - Change return receipt handling
- FORWARD - Change "Secure Forward" setting
- REPLYALL - Change "Secure Reply All" setting
- LOCALIZED_ENVELOPE - Enable or disable display of envelopes in languages other than English
- APPLET - Change applet suppression setting
- URL - Change URL associated with logo image
- TIMEOUT - Change maximum time message waits in encryption queue
- BOUNCE_SUBJECT - Change failure notification subject
- FILENAME - Change the file name of the envelope attached to the encryption notification.

1. High Security (Recipient must enter a password to open the encrypted message, even if credentials are cached (*Remember Me* selected).)
2. Medium Security (No password entry required if recipient credentials are cached (*Remember Me* selected).)
3. No Password Required (The recipient does not need a password to open the encrypted message.)

Please enter the envelope security level:

```
[1]> 1
```

Profile name: HIPAA
External URL: https://res.cisco.com
Encryption algorithm: ARC4
Payload Transport URL: http://res.cisco.com
Envelope Security: High Security
Return receipts enabled: Yes
Secure Forward enabled: No
Secure Reply All enabled: No
Suppress Applet: No
URL associated with logo image: <undefined>
Encryption queue timeout: 14400
Failure notification subject: [ENCRYPTION FAILURE]
Failure notification template: System Generated
Filename for the envelope: securedoc_${date}T${time}.html
Use Localized Envelope: No
Text notification template: System Generated
HTML notification template: System Generated

Choose the operation you want to perform:
- NAME - Change profile name
- EXTERNAL - Change external URL
- ALGORITHM - Change encryption algorithm
- PAYLOAD - Change the payload transport URL
- SECURITY - Change envelope security
- RECEIPT - Change return receipt handling
- FORWARD - Change "Secure Forward" setting
- REPLYALL - Change "Secure Reply All" setting
- LOCALIZED_ENVELOPE - Enable or disable display of envelopes in languages other than English
- APPLET - Change applet suppression setting
- URL - Change URL associated with logo image
- TIMEOUT - Change maximum time message waits in encryption queue
- BOUNCE_SUBJECT - Change failure notification subject
- FILENAME - Change the file name of the envelope attached to the encryption notification.

```
[1]> forward
```

Would you like to enable "Secure Forward"? [N]> y

Profile name: HIPAA
External URL: https://res.cisco.com
Encryption algorithm: ARC4
Payload Transport URL: http://res.cisco.com
Envelope Security: High Security
Return receipts enabled: Yes
Secure Forward enabled: Yes
Secure Reply All enabled: No
Suppress Applet: No
URL associated with logo image: <undefined>
Encryption queue timeout: 14400
Failure notification subject: [ENCRYPTION FAILURE]
Failure notification template: System Generated
Filename for the envelope: securedoc_${date}T${time}.html
Use Localized Envelope: No
Text notification template: System Generated
HTML notification template: System Generated

Choose the operation you want to perform:
- NAME - Change profile name
- EXTERNAL - Change external URL
- ALGORITHM - Change encryption algorithm
- PAYLOAD - Change the payload transport URL
- SECURITY - Change envelope security
- RECEIPT - Change return receipt handling
- FORWARD - Change "Secure Forward" setting
- REPLYALL - Change "Secure Reply All" setting
- LOCALIZED_ENVELOPE - Enable or disable display of envelopes in languages other than English
- APPLET - Change applet suppression setting
- TIMEOUT - Change maximum time message waits in encryption queue
- BOUNCE_SUBJECT - Change failure notification subject
- FILENAME - Change the file name of the envelope attached to the encryption notification.

Proxy: Not Configured

<table>
<thead>
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<td>HIPAA</td>
<td>Hosted Service</td>
<td>No</td>
<td>Not Provisioned</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- NEW - Create a new encryption profile
- EDIT - Edit an existing encryption profile
- DELETE - Delete an encryption profile
- PRINT - Print all configuration profiles
- CLEAR - Clear all configuration profiles
- PROXY - Configure a key server proxy

IronPort Email Encryption: Enabled

Choose the operation you want to perform:
- SETUP - Enable/Disable IronPort Email Encryption
- PROFILES - Configure email encryption profiles
- PROVISION - Provision with the Cisco Registered Envelope Service
encryptionstatus

Description

The `encryptionstatus` command shows the version of the PXE Engine and Domain Mappings file on the Email Security appliance, as well as the date and time the components were last updated.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> encryptionstatus

Component                 Version    Last Updated
PXE Engine                6.7.1      17 Nov 2009 00:09 (GMT)
Domain Mappings File      1.0.0      Never updated
```

encryptionupdate

Description

The `encryptionupdate` command requests an update to the PXE Engine on the Email Security appliance.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto).
Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> encryptionupdate

Requesting update of PXE Engine.
```
featurekey

Description

The `featurekey` command lists all functionality enabled by keys on the system and information related to the keys. It also allows you to activate features using a key or check for new feature keys.

For virtual appliances, see also `loadlicense` and `showlicense`.

Usage

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format

Example

In this example, the `featurekey` command is used to check for new feature keys.

```
mail3.example.com> featurekey
Module                              Quantity   Status     Remaining   Expiration Date
Outbreak Filters                    1          Active     28 days     Tue Feb 25 06:40:53 2014
IronPort Anti-Spam                  1          Dormant    30 days     Wed Feb 26 07:56:57 2014
Sophos Anti-Virus                   1          Active     26 days     Sun Feb 23 02:27:48 2014
Bounce Verification                 1          Dormant    30 days     Wed Feb 26 07:56:57 2014
Incoming Mail Handling              1          Active     20 days     Sun Feb 16 08:55:58 2014
IronPort Email Encryption           1          Dormant    30 days     Wed Feb 26 07:56:57 2014
RSA Email Data Loss Prevention      1          Active     25 days     Fri Feb 21 10:07:10 2014
McAfee                              1          Dormant    30 days     Wed Feb 26 07:56:57 2014
```

Choose the operation you want to perform:
- ACTIVATE - Activate a (pending) key.
- CHECKNOW - Check now for new feature keys.

```
[]> checknow
```

No new feature keys are available.

featurekeyconfig

Description

The `featurekeyconfig` command allows you to configure the machine to automatically download available keys and update the keys on the machine.
Usage

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

Example

In this example, the `featurekeyconfig` command is used to enable the autoactivate and autocheck features.

```
mail3.example.com> featurekeyconfig

Automatic activation of downloaded keys: Disabled
Automatic periodic checking for new feature keys: Disabled
Choose the operation you want to perform:
  - SETUP - Edit feature key configuration.
[>] setup

Automatic activation of downloaded keys: Disabled
Automatic periodic checking for new feature keys: Disabled
Choose the operation you want to perform:
  - AUTOACTIVATE - Toggle automatic activation of downloaded keys.
  - AUTOCHECK - Toggle automatic checking for new feature keys.
[>] autoactivate

Do you want to automatically apply downloaded feature keys? [N]> y

Automatic activation of downloaded keys: Enabled
Automatic periodic checking for new feature keys: Disabled
Choose the operation you want to perform:
  - AUTOACTIVATE - Toggle automatic activation of downloaded keys.
  - AUTOCHECK - Toggle automatic checking for new feature keys.
[>] autocheck

Do you want to periodically query for new feature keys? [N]> y

Automatic activation of downloaded keys: Enabled
Automatic periodic checking for new feature keys: Enabled
```

**fipsconfig**

Description

The `fipsconfig` command configures the Federal Information Processing Standard (FIPS) settings for Email Security appliances. You can use this command to:

- Enable or disable FIPS mode
- Encrypt sensitive data such as passwords and keys, in your appliance. If you enable this option,
  - Sensitive data in your appliance are encrypted and stored.
All users, including the administrators, cannot view the sensitive information in the configuration files.

- Swap space in your appliance is encrypted to prevent any unauthorized access or forensic attacks, if the physical security of the appliance is compromised.
- Check if your appliance contains any non-FIPS-compliant objects

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in the following modes: cluster and machine.
Batch Command: This command does not support a batch format.

Example: Enabling FIPS Mode

Before enabling FIPS mode, you must modify all the non-FIPS-compliant objects to meet the FIPS requirements.

The following example shows how to enable FIPS mode.

```
mail.example.com> fipsconfig
FIPS mode is currently disabled.
Choose the operation you want to perform:
- SETUP - Configure FIPS mode.
- FIPSCHECK - Check for FIPS mode compliance.
[/] > setup
To finalize FIPS mode, the appliance will reboot immediately. No commit will be required.
Are you sure you want to enable FIPS mode and reboot now? [N] > y
Do you want to enable encryption of sensitive data in configuration file when FIPS mode is enabled? Changing the value will result in system reboot [N] > n
Enter the number of seconds to wait before forcibly closing connections. [30] >
System rebooting. Please wait while the queue is being closed...
Closing CLI connection.
Rebooting the system...
```

Example: Encrypting Sensitive Data in a FIPS Compliant Appliance

The following example shows how to encrypt sensitive data in a FIPS compliant appliance.

```
mail.example.com> fipsconfig
FIPS mode is currently enabled.
Choose the operation you want to perform:
```
- SETUP - Configure FIPS mode.
- FIPSCHECK - Check for FIPS mode compliance.

[]> setup

To finalize FIPS mode, the appliance will reboot immediately. No commit will be required.

Are you sure you want to disable FIPS mode and reboot now? [N]> n

Do you want to enable encryption of sensitive data in configuration file when FIPS mode is enabled? Changing the value will result in system reboot [N]> y

Enter the number of seconds to wait before forcibly closing connections. [30]> 30

System rebooting. Please wait while the queue is being closed...

Closing CLI connection.
Rebooting the system...

Example: Checking FIPS Mode Compliance

The following example shows how to check if your appliance contains any non-FIPS-compliant objects.

Procedure

mail.example.com> fipsconfig

FIPS mode is currently disabled.

Choose the operation you want to perform:
- SETUP - Configure FIPS mode.
- FIPSCHECK - Check for FIPS mode compliance.

[]> fipscheck

Currently, there are non-FIPS-compliant objects configured.

List of non FIPS compliant DKIM Verification Profiles:

<table>
<thead>
<tr>
<th>Profile Name</th>
<th>Key Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>512</td>
</tr>
</tbody>
</table>

To be FIPS compliant, you must modify the above listed objects to meet FIPS requirements. For more information, see the FIPS Management chapter in the Cisco AsyncOS Email User Guide.

FIPS mode is currently disabled.

Note

Before enabling FIPS mode, you must modify all the non-FIPS-compliant objects to meet the FIPS requirements.

**generalconfig**

**Description**

The `generalconfig` command allows you to configure browser settings.
Usage

Commit: This command requires ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command supports a batch format. For details, see the inline help by typing the command: help generalconfig.

Example - Configure Internet Explorer Compatibility Mode Override

The following example shows how to override IE Compatibility Mode.

mail.example.com> generalconfig

Choose the operation you want to perform:
- IEOVERRIDE - Configure Internet Explorer Compatibility Mode Override
[]> ieooverride

For better web interface rendering, we recommend that you enable Internet Explorer Compatibility Mode Override. However, if enabling this feature is against your organizational policy, you may disable this feature.

Internet Explorer Compatibility Mode Override is currently disabled.

Would you like to enable Internet Explorer Compatibility Mode Override? [N]y

Choose the operation you want to perform:
- IEOVERRIDE - Configure Internet Explorer Compatibility Mode Override
[]>

healthcheck

Description

Checks the health of your Email Security appliance. Health check analyzes historical data (up to three months) in the current Status Logs to determine the health of the appliance.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

mail.example.com> healthcheck

Analyzing the system to determine current health of the system.
The analysis may take a while, depending on the size of the historical data.

System analysis is complete.
The analysis indicates that the system has experienced the following issue(s) recently:
Entered Resource conservation mode
Delay in mail processing
High CPU usage
High memory usage

Based on this analysis, we recommend you to contact Cisco Customer Support before upgrading.

healthconfig

Description

Configure the threshold of various health parameters of your appliance such as CPU usage, maximum messages in work queue and so on

Usage

Commit: This command requires `commit`.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

mail.example.com> healthconfig

Choose the operation you want to perform:
- WORKQUEUE - View and edit workqueue-health configuration.
- CPU - View and edit CPU-health configuration.
- SWAP - View and edit swap-health configuration.
][]> workqueue

Number of messages in the workqueue : 0
Current threshold on the workqueue size : 500
Alert when exceeds threshold : Disabled
Do you want to edit the settings? [N]> y

Please enter the threshold value for number of messages in work queue.
[500]> 550

Do you want to receive alerts if the number of messages in work queue exceeds threshold value? [N]> n

Choose the operation you want to perform:
- WORKQUEUE - View and edit workqueue-health configuration.
- CPU - View and edit CPU-health configuration.
- SWAP - View and edit swap-health configuration.
][]> cpu

Overall CPU usage : 0 %
Current threshold on the overall CPU usage: 85 %
Alert when exceeds threshold : Disabled
Do you want to edit the settings? [N]> y

Please enter the threshold value for overall CPU usage (in percent)
[85]> 90
Do you want to receive alerts if the overall CPU usage exceeds threshold value? [N] > n

Choose the operation you want to perform:
- WORKQUEUE - View and edit workqueue-health configuration.
- CPU - View and edit CPU-health configuration.
- SWAP - View and edit swap-health configuration.
[] > swap

Number of pages swapped from memory in a minute : 0
Current threshold on the number of pages swapped from memory per minute : 5000
Alert when exceeds threshold : Disabled
Do you want to edit the settings? [N] > y

Please enter the threshold value for number of pages swapped from memory in a minute.
[5000] > 5500

Do you want to receive alerts if number of pages swapped from memory in a minute exceeds the threshold? [N] > n

Choose the operation you want to perform:
- WORKQUEUE - View and edit workqueue-health configuration.
- CPU - View and edit CPU-health configuration.
- SWAP - View and edit swap-health configuration.
[]

ntpconfig

Description

The ntpconfig command configures AsyncOS to use Network Time Protocol (NTP) to synchronize the system clock with other computers. NTP can be turned off using the settime command.

Usage

Commit: This command requires ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

mail3.example.com> ntpconfig

Currently configured NTP servers:
1. time.ironport.com

Choose the operation you want to perform:
- NEW - Add a server.
- DELETE - Remove a server.
- SOURCEINT - Set the interface from whose IP address NTP queries should originate.
[] > new
Please enter the fully qualified hostname or IP address of your NTP server.

[]> ntp.example.com

Currently configured NTP servers:
1. time.ironport.com
2. bitsy.mit.edi

Choose the operation you want to perform:
- NEW - Add a server.
- DELETE - Remove a server.
- SOURCEINT - Set the interface from whose IP address NTP queries should originate.

[]> sourceint

When initiating a connection to an NTP server, the outbound IP address used is chosen automatically.
If you want to choose a specific outbound IP address, please select its interface name now.
1. Auto
2. Management (172.19.0.11/24: elroy.run)

[1]> 1

Currently configured NTP servers:
1. time.ironport.com
2. bitsy.mit.edi

Choose the operation you want to perform:
- NEW - Add a server.
- DELETE - Remove a server.
- SOURCEINT - Set the interface from whose IP address NTP queries should originate.

[]>

mail3.example.com> commit

Please enter some comments describing your changes:
[]> Added new NTP server

Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT

reboot

Description

Restart the appliance.

Usage

**Commit**: This command does not require a ‘commit’.

**Cluster Management**: This command is restricted to machine mode.

**Batch Command**: This command does not support a batch format.

Example

mail3.example.com> reboot
Enter the number of seconds to wait before abruptly closing connections.

Waiting for listeners to exit...
Receiving suspended.
Waiting for outgoing deliveries to finish...
Mail delivery suspended.

repengstatus

Description

Request version information of Reputation Engine.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

```
mail.example.com> repengstatus

Component                        Last Update                     Version
Reputation Engine                 28 Jan 2014 23:47 (GMT +00:00)  1
Reputation Engine Tools           28 Jan 2014 23:47 (GMT +00:00)  1
```

resume

Description

Resume receiving and deliveries

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> resume

Receiving resumed for Listener 1.
Mail delivery resumed.
Mail delivery for individually suspended domains must be resumed individually.
```
resumdel

Description
Resume deliveries.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail.example.com> resumdel
Currently suspended domains:
1. domain1.com
2. domain2.com
3. domain3.com

Enter one or more domains [comma-separated] to which you want to resume delivery.
[ALL]> domain1.com, domain2.com
Mail delivery resumed.

resumelistener

Description
Resume receiving on a listener.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail3.example.com> resumelistener
Choose the listener(s) you wish to resume.
Separate multiple entries with commas.
1. All
2. InboundMail
3. OutboundMail
[1]> 1
Receiving resumed.
mail3.example.com>

**revert**

**Description**

Revert to a previous release.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

**Example**

mail.example.com> revert

This command will revert the appliance to a previous version of AsyncOS.

WARNING: Reverting the appliance is extremely destructive.
The following data will be destroyed in the process:
- all configuration settings (including listeners)
- all log files
- all databases (including messages in Virus Outbreak and Policy quarantines)
- all reporting data (including saved scheduled reports)
- all message tracking data
- all IronPort Spam Quarantine message and end-user safelist/blocklist data

Only the network settings will be preserved.

Before running this command, be sure you have:
- saved the configuration file of this appliance (with passwords unmasked)
- exported the IronPort Spam Quarantine safelist/blocklist database to another machine (if applicable)
- waited for the mail queue to empty

Reverting the device causes an immediate reboot to take place.
After rebooting, the appliance reinitializes itself and reboots again to the desired version.

Available versions

1. 9.1.0-019

Please select an AsyncOS version [1]:
Do you want to continue? [N]>
settime

Description

The `settime` command allows you to manually set the time if you are not using an NTP server. The command asks you if you want to stop NTP and manually set the system clock. Enter the time in this format: `MM/DD/YYYY HH:MM:SS`.

Usage

Commit: This command does not require a 'commit'.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> settime
WARNING: Changes to system time will take place immediately and do not require the user to run the commit command.
This machine is currently running NTP.
In order to manually set the time, NTP must be disabled.
Do you want to stop NTP and manually set the time? [N]> Y

Please enter the time in MM/DD/YYYY HH:MM:SS format.
[>] 09/23/2001 21:03:53

```

settz

Description

Set the local time zone.

Usage

Commit: This command requires a 'commit'.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> settz
Current time zone: Etc/GMT
Current time zone version: 2010.02.0
```
Choose the operation you want to perform:
- SETUP - Set the local time zone.

[]> setup

Please choose your continent:
1. Africa
2. America
[ ... ]
11. GMT Offset
[]> 2

Please choose your country:
1. Anguilla
[ ... ]
45. United States
46. Uruguay
47. Venezuela
48. Virgin Islands (British)
49. Virgin Islands (U.S.)
[45]> 45

Please choose your timezone:
1. Alaska Time (Anchorage)
2. Alaska Time - Alaska panhandle (Juneau)
[ ... ]
21. Pacific Time (Los_Angeles)
[21]> 21

Current time zone: America/Los_Angeles

Choose the operation you want to perform:
- SETUP - Set the local time zone.
[]>

**shutdown**

**Description**

Shut down the system to power off

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format.

**Example**

```
mail.example.com> shutdown

Enter the number of seconds to wait before forcibly closing connections.
[30]>

System shutting down. Please wait while the queue is being closed...

Closing CLI connection.
```
The system will power off automatically.
Connection to mail.example.com closed.

**sshconfig**

**Description**

Configure SSH server and user key settings.

**Usage**

- **Commit**: This command requires a ‘commit’.
- **Cluster Management**: This command is restricted to cluster mode.
- **Batch Command**: This command does not support a batch format.
- **Reboot**: Reboot is required for changes to take effect.

**Example**

In the following example, a new public key is installed for the administrator account:

```
mail.example.com> sshconfig
Choose the operation you want to perform:
- SSHD - Edit SSH server settings.
- USERKEY - Edit SSH User Key settings
[
]> userkey
Currently installed keys for admin:
```

Choose the operation you want to perform:
- **NEW** - Add a new key.
- **USER** - Switch to a different user to edit.
[
]> new

Please enter the public SSH key for authorization.
Press enter on a blank line to finish.
[-paste public key for user authentication here-]
```
Choose the operation you want to perform:
- SSHD - Edit SSH server settings.
- USERKEY - Edit SSH User Key settings
[
>
The following example shows how to edit the SSH server configuration.

```
mail.example.com> sshconfig
Choose the operation you want to perform:
- SSHD - Edit SSH server settings.
- USERKEY - Edit SSH User Key settings
[
]> sshd
ssh server config settings:
Public Key Authentication Algorithms:
  rsa1
  ssh-dss
```
ssh-rsa

Cipher Algorithms:
  aes128-ctr
  aes192-ctr
  aes256-ctr
  arcfour256
  arcfour128
  aes128-cbc
  3des-cbc
  blowfish-cbc
  cast128-cbc
  aes192-cbc
  aes256-cbc
  arcfour
  rijndael-cbc@lysator.liu.se

MAC Methods:
  hmac-md5
  hmac-sha1
  umac-64@openssh.com
  hmac-ripemd160
  hmac-ripemd160@openssh.com
  hmac-sha1-96
  hmac-md5-96

Minimum Server Key Size:
  1024

KEX Algorithms:
  diffie-hellman-group-exchange-sha256
  diffie-hellman-group-exchange-sha1
  diffie-hellman-group14-sha1
  diffie-hellman-group1-sha1
  ...

Choose the operation you want to perform:
- SETUP - Setup SSH server configuration settings
[]> setup

Enter the Public Key Authentication Algorithms do you want to use
[r, rsa1, ssh-dss, ssh-rsa]>

Enter the Cipher Algorithms do you want to use
[aes128-ctr, aes192-ctr, aes256-ctr, arcfour256, arcfour128, aes128-cbc, 3des-cbc, blowfish-cbc, cast128-cbc, aes192-cbc, aes256-cbc, arcfour, rijndael-cbc@lysator.liu.se]>

Enter the MAC Methods do you want to use
[hmac-md5, hmac-sha1, umac-64@openssh.com, hmac-ripemd160, hmac-ripemd160@openssh.com, hmac-sha1-96, hmac-md5-96]>

Enter the Minimum Server Key Size do you want to use
[1024]>

Enter the KEX Algorithms do you want to use
[diffie-hellman-group-exchange-sha256, diffie-hellman-group-exchange-sha1, diffie-hellman-group14-sha1, diffie-hellman-group1-sha1]>

ssh server config settings:
Public Key Authentication Algorithms:
  rsal
  ssh-dss
  ssh-rsa
Cipher Algorithms:
  aes128-ctr
  aes192-ctr
  aes256-ctr
  arcfour256
  arcfour128
aes128-cbc
3des-cbc
blowfish-cbc
cast128-cbc
aes192-cbc
aes256-cbc
arcfour
rijndael-cbc@lysator.liu.se

MAC Methods:
hmac-md5
hmac-sha1
umac-64@openssh.com
hmac-ripemd160
hmac-ripemd160@openssh.com
hmac-sha1-96
hmac-md5-96

Minimum Server Key Size:
1024

KEX Algorithms:
diffie-hellman-group-exchange-sha256
diffie-hellman-group-exchange-sha1
diffie-hellman-group14-sha1
diffie-hellman-group1-sha1

Choose the operation you want to perform:
- SETUP - Setup SSH server configuration settings

Choose the operation you want to perform:
- SSHD - Edit SSH server settings.
- USERKEY - Edit SSH User Key settings

status

Description

Show system status.

Usage

Commit: This command does not require a 'commit'.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail3.example.com> status

Status as of: Thu Oct 21 14:33:27 2004 PDT
Up since: Wed Oct 20 15:47:58 2004 PDT (22h 45m 29s)
Last counter reset: Never
System status: Online
Oldest Message: 4 weeks 46 mins 53 secs
**Feature - McAfee:** 161 days

**Feature - Outbreak Filters:** 161 days

<table>
<thead>
<tr>
<th>Counters:</th>
<th>Reset</th>
<th>Uptime</th>
<th>Lifetime</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Messages Received</td>
<td>62,049,822</td>
<td>290,920</td>
<td>62,049,822</td>
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<tr>
<td>Recipients Received</td>
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<td>290,920</td>
<td>62,049,823</td>
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<td>Rejection</td>
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<tr>
<td>Rejected Recipients</td>
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<td>11,921</td>
<td>3,949,663</td>
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<tr>
<td>Dropped Messages</td>
<td>11,606,037</td>
<td>219</td>
<td>11,606,037</td>
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<td>Queue</td>
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<tr>
<td>Soft Bounced Events</td>
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<td>13,598</td>
<td>2,334,552</td>
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<tr>
<td>Completion</td>
<td></td>
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<td>Completed Recipients</td>
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<td>332,625</td>
<td>50,441,741</td>
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<td>Current IDs</td>
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<td>Message ID (MID)</td>
<td>99524480</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Injection Conn. ID (ICID)</td>
<td>51180368</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delivery Conn. ID (DCID)</td>
<td>17550674</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gauges:</th>
<th>Current</th>
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</thead>
<tbody>
<tr>
<td>Connections</td>
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<td>Current Inbound Conn.</td>
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<tr>
<td>Current Outbound Conn.</td>
<td>14</td>
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<td>Queue</td>
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<tr>
<td>Active Recipients</td>
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<tr>
<td>Messages In Work Queue</td>
<td>0</td>
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<tr>
<td>Kilobytes Used</td>
<td>92</td>
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<tr>
<td>Kilobytes Free</td>
<td>8,388,516</td>
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<tr>
<td>Quarantine</td>
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</tr>
<tr>
<td>Messages In Quarantine</td>
<td>0</td>
</tr>
<tr>
<td>Policy, Virus and Outbreak</td>
<td>0</td>
</tr>
<tr>
<td>Kilobytes In Quarantine</td>
<td>0</td>
</tr>
<tr>
<td>Policy, Virus and Outbreak</td>
<td>0</td>
</tr>
</tbody>
</table>

**supportrequest**

**Description**

Send a message to Cisco customer support. This command requires that the appliance is able to send mail to the Internet. A trouble ticket is automatically created, or you can associate the support request with an existing trouble ticket.

To access Cisco technical support directly from the appliance, your Cisco.com user ID must be associated with your service agreement contract for this appliance. To view a list of service contracts that are currently associated with your Cisco.com profile, visit the Cisco.com Profile Manager at https://sso.cisco.com/autho/forms/CDClogin.html. If you do not have a Cisco.com user ID, register to get one. See information about registering for an account in the online help or user guide for your release.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.

**Batch Command:** This command does not support a batch format.
Example

The following example shows a support request that is not related to an existing support ticket.

mail.example.com> supportrequest

Please Note:
If you have an urgent issue, please call one of our worldwide Support Centers (www.cisco.com/support). Use this command to open a technical support request for issues that are not urgent, such as:
- Request for information.
- Problem for which you have a work-around, but would like an alternative solution.

Do you want to send the support request to supportrequest@mail.qa? [Y]> 

Do you want to send the support request to additional recipient(s)? [N]> 

Is this support request associated with an existing support ticket? [N]> 

Please select a technology related to this support request:
1. Security - Email and Web
2. Security - Management
[1]> 1

Please select a subtechnology related to this support request:
1. Cisco Email Security Appliance (C1x0,C3x0, C6x0, X10x0) - Misclassified Messages
2. Cisco Email Security Appliance (C1x0,C3x0, C6x0, X10x0) - SBRS
3. Cisco Email Security Appliance (C1x0,C3x0, C6x0, X10x0) - Other
4. Email Security Appliance - Virtual
[1]> 3

Please select the problem category:
1. Upgrade
2. Operate
3. Configure
4. Install
[1]> 3

Please select a problem sub-category:
1. Error Messages, Logs, Debugs
2. Software Failure
3. Interoperability
4. Configuration Assistance
5. Install, Uninstall or Upgrade
6. Hardware Failure
7. Licensing
8. Data Corruption
9. Software Selection/Download Assistance
10. Password Recovery
[1]> 5

Please enter a subject line for this support request: []> <Subject line for support request>

Please enter a description of your issue, providing as much detail as possible to aid in diagnosis: []> <Description of issue>
It is important to associate all your service contracts with your Cisco.com profile (CCO ID) in order for you to receive complete access to support and services from Cisco. Please follow the URLs below to associate your contract coverage on your Cisco.com profile. If you do not have a CCO ID, please follow the URL below to create a CCO ID.

How to create a CCO ID:
How to associate your CCO ID with contract:
https://tools.cisco.com/RPFA/profile/profile_management.do
Frequently Asked Question:

Select the CCOID
1. New CCOID
[1]

Please enter the CCOID of the contact person:
[> your name

The CCO ID may contain alphabets, numbers and '@', '.', '-' and '_' symbols.

Please enter the CCOID of the contact person:
[> me@example.com

Please enter the name of the contact person:
[> your name

Please enter your email address:
[> me@example.com

Please enter the contract ID:
[> 1234

Please enter any additional contact information (e.g. phone number):
[>

Please wait while configuration information is generated...

Do you want to print the support request to the screen?
[N]

**supportrequeststatus**

**Description**

Display Support Request Keywords version information for requesting support from Cisco TAC.

**Usage**

**Commit**: This command does not require a ‘commit’.

**Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).

**Batch Command**: This command does not support a batch format.
Example

```
mail.example.com> supportrequeststatus

Component                Version    Last Updated
Support Request           1.0        Never updated
```

supportrequestupdate

Description

Request manual update of Support Request Keywords for requesting support from Cisco TAC.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

```
mail.example.com> supportrequestupdate

Requesting update of Support Request Keywords.
```

suspend

Description

Suspend receiving and deliveries

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> suspend

Enter the number of seconds to wait before abruptly closing connections.
[30]> 45

Waiting for listeners to exit...
Receiving suspended for Listener 1.
Waiting for outgoing deliveries to finish...
Mail delivery suspended.
```
suspenddel

Description

Suspend deliveries

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail.example.com> suspenddel

Enter the number of seconds to wait before abruptly closing connections.
[30]> 

Enter one or more domains [comma-separated] to which you want to suspend delivery.
[ALL]> domain1.com, domain2.com, domain3.com

Waiting for outgoing deliveries to finish...
Mail delivery suspended.

suspendlistener

Description

Suspend receiving.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail3.example.com> suspendlistener

Choose the listener(s) you wish to suspend.
Separate multiple entries with commas.
1. All
2. InboundMail
3. OutboundMail

[1]> 1

Enter the number of seconds to wait before abruptly closing connections.

[30]>

Waiting for listeners to exit...
Receiving suspended.

mail3.example.com> 

tcpservices

Description

Display information about files opened by processes.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode.

Batch Command: This command does not support a batch format.

Example

mail.cisco.com> tcpservices

System Processes (Note: All processes may not always be present)

ftpd.main - The FTP daemon
ginetd - The INET daemon
interface - The interface controller for inter-process communication
ipfw - The IP firewall
slapd - The Standalone LDAP daemon
snmpd - The SNMP daemon
sshd - The SSH daemon
syslogd - The system logging daemon
winbindd - The Samba Name Service Switch daemon

d Feature Processes

euq_webui - GUI for ISQ
gui - GUI process
hermes - MGA mail server
postgres - Process for storing and querying quarantine data
splunkd - Processes for storing and querying Email Tracking data

<table>
<thead>
<tr>
<th>COMMAND</th>
<th>USER</th>
<th>TYPE</th>
<th>NODE</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>interface</td>
<td>root</td>
<td>IPv4</td>
<td>TCP</td>
<td>127.0.0.1:53</td>
</tr>
<tr>
<td>postgres</td>
<td>pgsql</td>
<td>IPv4</td>
<td>TCP</td>
<td>127.0.0.1:5432</td>
</tr>
<tr>
<td>qabackdoo</td>
<td>root</td>
<td>IPv4</td>
<td>TCP</td>
<td>*:8123</td>
</tr>
<tr>
<td>ftpd.main</td>
<td>root</td>
<td>IPv4</td>
<td>TCP</td>
<td>10.1.1.0:21</td>
</tr>
<tr>
<td>euq_webui</td>
<td>root</td>
<td>IPv4</td>
<td>TCP</td>
<td>10.1.1.0:83</td>
</tr>
<tr>
<td>euq_webui</td>
<td>root</td>
<td>IPv6</td>
<td>TCP</td>
<td>[2001:db8::]:83</td>
</tr>
<tr>
<td>gui</td>
<td>root</td>
<td>IPv4</td>
<td>TCP</td>
<td>172.29.181.70:60</td>
</tr>
<tr>
<td>gui</td>
<td>root</td>
<td>IPv4</td>
<td>TCP</td>
<td>10.1.1.0:80</td>
</tr>
<tr>
<td>gui</td>
<td>root</td>
<td>IPv6</td>
<td>TCP</td>
<td>[2001:db8::]:80</td>
</tr>
<tr>
<td>gui</td>
<td>root</td>
<td>IPv4</td>
<td>TCP</td>
<td>172.29.181.70:443</td>
</tr>
<tr>
<td>gui</td>
<td>root</td>
<td>IPv4</td>
<td>TCP</td>
<td>10.1.1.0:443</td>
</tr>
</tbody>
</table>
techsupport

Description

Allow Cisco TAC to access your system.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail3.example.com> techsupport

Service Access currently disabled.
Serial Number: XXXXXXXXXXXX-XXXXXXX

Choose the operation you want to perform:
- SSHACCESS - Allow a Cisco IronPort Customer Support representative to remotely access your system, without establishing a tunnel.
- TUNNEL - Allow a Cisco IronPort Customer Support representative to remotely access your system, and establish a secure tunnel for communication.
- STATUS - Display the current techsupport status.
[1]> sshaccess

A random seed string is required for this operation

1. Generate a random string to initialize secure communication (recommended)
2. Enter a random string
   [1]> 1

Are you sure you want to enable service access? [N]> y

Service access has been ENABLED. Please provide the string:

QT22-JQZF-YAQL-TL8L-8@2L-95

to your Cisco IronPort Customer Support representative.
Service Access currently ENABLED (0 current service logins).
Tunnel option is not active.

Serial Number: XXXXXXXXXXXX-XXXXXXX

Choose the operation you want to perform:
- DISABLE - Prevent customer service representatives from remotely accessing your system.
- STATUS - Display the current techsupport status.


**tlsverify**

**Description**

Establish an outbound TLS connection on demand and debug any TLS connection issues concerning a destination domain. To create the connection, specify the domain to verify against and the destination host. AsyncOS checks the TLS connection based on the Required (Verify) TLS setting.

**Usage**

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command supports a batch format.

**Batch Format**

The batch format of the tlsverify command can be used to perform all the functions of the traditional CLI command to check the TLS connection to the given hostname.

```
tlsverify <domain> <hostname>[[:<port>]]
```

**Example**

```
mail3.example.com> tlsverify
Enter the TLS domain to verify against:
[<domain>]: example.com
Enter the destination host to connect to. Append the port (example.com:26) if you are not connecting on port 25:
[<hostname>]: mxe.example.com:25
Connecting to 1.1.1.1 on port 25.
Connected to 1.1.1.1 from interface 10.10.10.10.
Checking TLS connection.
TLS connection established: protocol TLSv1, cipher RC4-SHA.
Verifying peer certificate.
Verifying certificate common name mxe.example.com.
TLS certificate match mxe.example.com.
TLS certificate verified.
TLS connection to 1.1.1.1 succeeded.
```
TLS successfully connected to mxe.example.com.
TLS verification completed.

**trace**

**Description**

Trace the flow of a message through the system

**Usage**

**Commit**: This command does not require a ‘commit’.

**Cluster Management**: This command is restricted to machine mode.

**Batch Command**: This command does not support a batch format.

**Example**

```plaintext
mail3.example.com> trace

Enter the source IP
{}> 192.168.1.1

Enter the fully qualified domain name of the source IP
{}> example.com

Select the listener to trace behavior on:
1. InboundMail
2. OutboundMail
{}> 1

Fetching default SenderBase values...
Enter the SenderBase Org ID of the source IP. The actual ID is N/A.
{N/A}>

Enter the SenderBase Reputation Score of the source IP. The actual score is N/A.
{N/A}>

Enter the Envelope Sender address:
{}> pretend.sender@example.net

Enter the Envelope Recipient addresses. Separate multiple addresses by commas.
{}> admin@example.com

Load message from disk? [Y]> n

Enter or paste the message body here. Enter '.' on a blank line to end.
Subject: Hello
This is a test message.
.
HAT matched on unnamed sender group, host ALL
- Applying $ACCEPTED policy (ACCEPT behavior).
- Maximum Message Size: 100M (Default)
- Maximum Number Of Connections From A Single IP: 1000 (Default)
- Maximum Number Of Messages Per Connection: 1,000 (Default)
- Maximum Number Of Recipients Per Message: 1,000 (Default)
- Maximum Recipients Per Hour: 100 (Default)
```
- Use SenderBase For Flow Control: Yes (Default)
- Spam Detection Enabled: Yes (Default)
- Virus Detection Enabled: Yes (Default)
- Allow TLS Connections: No (Default)

Processing MAIL FROM:
- Default Domain Processing: No Change

Processing Recipient List:
Processing admin@ironport.com
- Default Domain Processing: No Change
- Domain Map: No Change
- RAT matched on admin@ironport.com, behavior = ACCEPT
- Alias expansion: No Change

Message Processing:
- No Virtual Gateway(tm) Assigned
- No Bounce Profile Assigned

Domain Masquerading/LDAP Processing:
- No Changes.

Processing filter 'always_deliver':
Evaluating Rule: rcpt-to == "@mail.qa"
  Result = False
Evaluating Rule: rcpt-to == "ironport.com"
  Result = True
Evaluating Rule: OR
  Result = True
Executing Action: deliver()

Footer Stamping:
- Not Performed

Inbound Recipient Policy Processing: (matched on Management Upgrade policy)
Message going to: admin@ironport.com

AntiSpam Evaluation:
- Not Spam

AntiVirus Evaluation:
- Message Clean.
  - Elapsed Time = '0.000 sec'

Outbreak Filter Evaluation:
- No threat detected

Message Enqueued for Delivery

Would you like to see the resulting message? [Y]> y

Final text for messages matched on policy Management Upgrade
Final Envelope Sender: pretend.sender@example.dom
Final Recipients:
- admin@ironport.com

Final Message Content:

Received: from remotehost.example.com (HELO TEST) (1.2.3.4)
  by stacy.qa with TEST; 19 Oct 2004 00:54:48 -0700
Message-Id: <3i93q9$@Management>
X-IronPort-AV: i="3.86,81,1096873200";
d="scan'208"; a="0:sNH70"
Subject: hello

This is a test message.

Run through another debug session? [N]>

Note When using trace, you must include both the header and the body of the message pasted into the CLI.

trackingconfig

Description

Configure the tracking system.

Usage

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

Example

mail.example.com> trackingconfig

Message Tracking service status: Message Tracking is enabled.

Choose the operation you want to perform:
- SETUP - Enable Message Tracking for this appliance.
  []> setup

Would you like to use the Message Tracking Service? [Y]>

Do you want to use Centralized Message Tracking for this appliance? [N]>

Would you like to track rejected connections? [N]>

Message Tracking service status: Local Message Tracking is enabled. Rejected connections are currently not being tracked.

Choose the operation you want to perform:
- SETUP - Enable Message Tracking for this appliance.
  []>

tzupdate

Description

Update timezone rules
Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto).

Batch Command: This command supports a batch format.

Batch Format

The batch format of the `tzupdate` command forces an update off all time zone rules even if no changes are detected.

```
tzupdate [force]
```

Example

```
mail.example.com> tzupdate

Requesting update of Timezone Rules
```

updateconfig

Description

Configure system update parameters.

Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format.

Examples

- Configure the Appliance to Download Updates from Updater Servers, page 3-112
- Configure the Appliance to Verify the Validity of Updater Server Certificate, page 3-115
- Configure the Appliance to Trust Proxy Server Communication, page 3-116

Configure the Appliance to Download Updates from Updater Servers

In the following example, the `updateconfig` command is used to configure the appliance to download update images from Cisco servers and download the list of available AsyncOS upgrades from a local server.

```
mail.example.com> updateconfig

Service (images):    Update URL:
```
<table>
<thead>
<tr>
<th>Feature Key updates</th>
<th><a href="http://downloads.ironport.com/asyncos">http://downloads.ironport.com/asyncos</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Timezone rules</td>
<td>Cisco IronPort Servers</td>
</tr>
<tr>
<td>Enrollment Client Updates</td>
<td>Cisco IronPort Servers</td>
</tr>
<tr>
<td>Support Request updates</td>
<td>Cisco IronPort Servers</td>
</tr>
<tr>
<td>Cisco IronPort AsyncOS upgrades</td>
<td>Cisco IronPort Servers</td>
</tr>
</tbody>
</table>

Service (list): Update URL:

<table>
<thead>
<tr>
<th>Timezone rules</th>
<th>Cisco IronPort Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment Client Updates</td>
<td>Cisco IronPort Servers</td>
</tr>
<tr>
<td>Support Request updates</td>
<td>Cisco IronPort Servers</td>
</tr>
</tbody>
</table>

Service (list): Update URL:

| Cisco IronPort AsyncOS upgrades | Cisco IronPort Servers |

Update interval: 5m

Proxy server: not enabled

HTTPS Proxy server: not enabled

Choose the operation you want to perform:
- SETUP - Edit update configuration.
- VALIDATE_CERTIFICATES - Validate update server certificates
- TRUSTED_CERTIFICATES - Manage trusted certificates for updates

[]> setup

For the following services, please select where the system will download updates from:
Service (list): Update URL:

<table>
<thead>
<tr>
<th>Feature Key updates</th>
<th><a href="http://downloads.ironport.com/asyncos">http://downloads.ironport.com/asyncos</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Use Cisco IronPort update servers (<a href="http://downloads.ironport.com">http://downloads.ironport.com</a>)</td>
<td></td>
</tr>
<tr>
<td>2. Use own server</td>
<td></td>
</tr>
</tbody>
</table>

[1]>

For the following services, please select where the system will download updates from (images):
Service (images): Update URL:

<table>
<thead>
<tr>
<th>Timezone rules</th>
<th>Cisco IronPort Servers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment Client Updates</td>
<td>Cisco IronPort Servers</td>
</tr>
<tr>
<td>Support Request updates</td>
<td>Cisco IronPort Servers</td>
</tr>
</tbody>
</table>

1. Use Cisco IronPort update servers
2. Use own server

[1]>

For the following services, please select where the system will download updates from (images):
Service (images): Update URL:

| Cisco IronPort AsyncOS upgrades | Cisco IronPort Servers |

1. Use Cisco IronPort update servers
2. Use own server

[1]> 

For the following services, please select where the system will download the list of available updates from:

Service (list):                                      Update URL:
------------------------------------------------------------------------------------------
Timezone rules                                       Cisco IronPort Servers
Enrollment Client Updates                            Cisco IronPort Servers
Support Request updates                              Cisco IronPort Servers
------------------------------------------------------------------------------------------
1. Use Cisco IronPort update servers
2. Use own update list

[1]> 

For the following services, please select where the system will download the list of available updates from:

Service (list):                                      Update URL:
------------------------------------------------------------------------------------------
Cisco IronPort AsyncOS upgrades                      Cisco IronPort Servers
------------------------------------------------------------------------------------------
1. Use Cisco IronPort update servers
2. Use own update list

[1]> 

Enter the time interval between checks for new:
- Timezone rules
- Enrollment Client Updates (used to fetch certificates for URL Filtering)
- Support Request updates

Use a trailing 's' for seconds, 'm' for minutes or 'h' for hours. The minimum valid update time is 30s or enter '0' to disable automatic updates (manual updates will still be available for individual services).

[5m]>

When initiating a connection to the update server the originating IP interface is chosen automatically. If you want to choose a specific interface, please specify it now.

1. Auto
2. Management (10.76.69.149/24: vm30esa0086.ibqa)

[1]>

Do you want to set up a proxy server for HTTP updates for ALL of the following services:
- Feature Key updates
- Timezone rules
- Enrollment Client Updates (used to fetch certificates for URL Filtering)
- Support Request updates
- Cisco IronPort AsyncOS upgrades

[N]> 

Do you want to set up an HTTPS proxy server for HTTPS updates for ALL of the following services:
- Feature Key updates
- Timezone rules
- Enrollment Client Updates (used to fetch certificates for URL Filtering)
- Support Request updates
- Cisco IronPort AsyncOS upgrades
- SenderBase Network Participation sharing
Configure the Appliance to Verify the Validity of Updater Server Certificate

If you configure this option, every time the appliance communicates the Cisco updater server, the validity of the updater server certificate is verified. If the verification fails, updates are not downloaded and the details are logged in Updater Logs. The following example shows how to configure this option:

mail.example.com> updateconfig

Choose the operation you want to perform:
- SETUP - Edit update configuration.
- VALIDATE_CERTIFICATES - Validate update server certificates
- TRUSTED_CERTIFICATES - Manage trusted certificates for updates

Choose the operation you want to perform:
Update interval: 5m

Proxy server: not enabled

HTTPS Proxy server: not enabled

Choose the operation you want to perform:
- SETUP - Edit update configuration.
- VALIDATE_CERTIFICATES - Validate update server certificates
- TRUSTED_CERTIFICATES - Manage trusted certificates for updates
[] validate_certificates

Should server certificates from Cisco update servers be validated?
[Yes]

Service (images):
Feature Key updates                               Update URL:
Timezone rules                                    http://downloads.ironport.com/asyncos
Enrollment Client Updates                         Cisco IronPort Servers
Support Request updates                          Cisco IronPort Servers
Cisco IronPort AsyncOS upgrades                  Cisco IronPort Servers

Service (list):
Timezone rules                                    Update URL:
Enrollment Client Updates                         Cisco IronPort Servers
Support Request updates                          Cisco IronPort Servers
Cisco IronPort AsyncOS upgrades                  Cisco IronPort Servers

Update interval: 5m

Proxy server: not enabled

HTTPS Proxy server: not enabled

Choose the operation you want to perform:
- SETUP - Edit update configuration.
- VALIDATE_CERTIFICATES - Validate update server certificates
- TRUSTED_CERTIFICATES - Manage trusted certificates for updates
[]

Configure the Appliance to Trust Proxy Server Communication

If you are using a non-transparent proxy server, you can add the CA certificate used to sign the proxy certificate to the appliance. By doing so, the appliance trusts the proxy server communication. The following example shows how to configure this option:

Choose the operation you want to perform:
- SETUP - Edit update configuration.
- VALIDATE_CERTIFICATES - Validate update server certificates
- TRUSTED_CERTIFICATES - Manage trusted certificates for updates
[] trusted_certificates

Choose the operation you want to perform:
- ADD - Upload a new trusted certificate for updates.

]\> add

Paste certificates to be trusted for secure updater connections, blank to quit
Trusted Certificate for Updater:
Paste cert in PEM format (end with '.

-----BEGIN CERTIFICATE-----
MIICiDCCAfGgAwIBAgIBATANBgkqhkiG9w0BAQUFADCBgDELMAkGA1UEBhMCSU4x
DDAKBgNVBAgTABENM...                                        
-----END CERTIFICATE-----
.

Choose the operation you want to perform:
- ADD - Upload a new trusted certificate for updates.
- LIST - List trusted certificates for updates.
- DELETE - Delete a trusted certificate for updates.

]\> updatenow

**Description**

Requests an update to all system service components.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto).

**Batch Command:** This command does support a batch format.

**Batch Format**

The batch format of the `updatenow` command can be used to update all components on the appliance even if no changes are detected.

```
updatenow [force]
```

**Example**

```
mail3.example.com> updatenow
Success - All component updates requested
```

**version**

**Description**

View system version information
Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode.

Batch Command: This command does not support a batch format.

Example

mail3.example.com> version

Current Version
===============
Product: Cisco C100V Email Security Virtual Appliance
Model: C100V
Version: 9.1.0-019
Build Date: 2015-02-17
Install Date: 2015-02-19 05:17:56
Serial #: 421C73B18CFB05784A83-B03A99E71ED8
BIOS: 6.00
CPUs: 2 expected, 2 allocated
Memory: 6144 MB expected, 6144 MB allocated
RAID: NA
RAID Status: Unknown
RAID Type: NA
BMC: NA

wipedata

Description

Use the wipedata command to wipe the core files on the disk and check the status of the last coredump operation.

Note

Depending on the size of the data, wipe action may take a while and can affect the system performance until the action is complete.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode.

Batch Command: This command does not support a batch format.

Example

mail.example.com> wipedata

Wiping data may take a while and can affect system performance till it completes.

Choose the operation you want to perform:
- STATUS - Display status of last command run
- COREDUMP - Wipe core files on disk

```bash
[]> coredump
```

wipedata: In progress
```
mail.example.com> wipedata
```

Wiping data may take a while and can affect system performance till it completes.

Choose the operation you want to perform:
- STATUS - Display status of last command run
- COREDUMP - Wipe core files on disk

```
[]> status
```

Last wipedata status: Successful

## upgrade

### Description

The upgrade CLI command displays a list of available upgrades and upgrades the AsyncOS system to the version specified by the user.

### Usage

**Commit**: This command does not require a ‘commit’.

**Cluster Management**: This command is restricted to machine mode.

**Batch Command**: This command does not support a batch format.

### Example

```
mail3.example.com> upgrade
```

Upgrades available:

1. AsyncOS (***DON'T TOUCH!***) 4.0.8 upgrade, 2005-05-09 Build 900
2. AsyncOS 4.0.8 upgrade, 2005-08-12 Build 030
........
45. SenderBase Network Participation Patch

```
[45]> 
```

Performing an upgrade will require a reboot of the system after the upgrade is applied.

Do you wish to proceed with the upgrade? [Y]> Y

## Content Scanning

- contentscannerstatus, page 3-120
- contentscannerupdate, page 3-120
contentscannerstatus

Display the content scanning engine version information.

Usage

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format.

Example

```
mail.example.com> contentscannerstatus

Component              Version                Last Updated
Content Scanner Tools  11.2.1884.970097       Never updated
```

contentscannernupdate

Request manual update of the content scanning engine. If ‘force’ parameter is used, update is performed even if no changes are detected.

Usage

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto).

**Batch Command:** This command does not support a batch format.

Example

```
mail.example.com> contentscannernupdate force

Requesting forced update for Content Scanner.
```

LDAP

This section contains the following CLI commands:

- `ldapconfig`
- `ldapflush`
- `ldaptest`
- `sievechar`
ldapconfig

Description

Configure LDAP servers

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example - Creating a New LDAP Server Profile

In the following example, the ldapconfig command is used to define an LDAP server for the appliance to bind to, and queries for recipient acceptance (ldapaccept subcommand), routing (ldaprouting subcommand), masquerading (masquerade subcommand), end-user authentication for the Spam Quarantine (isqauth subcommand), and alias consolidation for spam notifications (isqalias subcommand) are configured.

First, the nickname of “PublicLDAP” is given for the mldapserver.example.com LDAP server. Queries are directed to port 3268 (the default). The search base of example.com is defined (dc=example,dc=com), and queries for recipient acceptance, mail re-routing, and masquerading are defined. The queries in this example are similar to an OpenLDAP directory configuration which uses the inetLocalMailRecipient auxiliary object class defined in the expired Internet Draft draft-lachman-laser-ldap-mail-routing-xx.txt, also sometimes known as “the Laser spec.” (A version of this draft is included with the OpenLDAP source distribution.) Note that in this example, the alternate mailhost to use for queried recipients in the mail re-routing query is mailForwardingAddress. Remember that query names are case-sensitive and must match exactly in order to return the proper results.

mail3.example.com> ldapconfig

No LDAP server configurations.

Choose the operation you want to perform:
- NEW - Create a new server configuration.
- SETUP - Configure LDAP options.
[1]> new

Please create a name for this server configuration (Ex: "PublicLDAP"): [1]> PublicLDAP

Please enter the hostname: [1]> myldapserver.example.com

Use SSL to connect to the LDAP server? [N]> n

Select the authentication method to use for this server configuration:
1. Anonymous
2. Password based
[1]> 2

Please enter the bind username: [cn=Anonymous]>
Please enter the bind password:
[]>

Connect to LDAP server to validate setting? [Y]

Connecting to the LDAP server, please wait...

Select the server type to use for this server configuration:
1. Active Directory
2. OpenLDAP
3. Unknown or Other
[3]> 1

Please enter the port number:
[3268]> 3268

Please enter the base:
[dc=example,dc=com]> dc=example,dc=com

Name: PublicLDAP
Hostname: myldapserver.example.com Port 3268
Server Type: Active Directory
Authentication Type: password
Base: dc=example,dc=com

Choose the operation you want to perform:
- SERVER - Change the server for the query.
- TEST - Test the server configuration.
- LDAPACCEPT - Configure whether a recipient address should be accepted or bounced/dropped.
- LDAPROUTING - Configure message routing.
- MASQUERADE - Configure domain masquerading.
- LDAPGROUP - Configure whether a sender or recipient is in a specified group.
- SMTPAUTH - Configure SMTP authentication.
- CERTAUTH - Configure certificate authentication.
- EXTERNALAUTH - Configure external authentication queries.
- ISQAUTH - Configure Spam Quarantine End-User Authentication Query.
- ISQALIAS - Configure Spam Quarantine Alias Consolidation Query.

[> ldapaccept

Please create a name for this query:
[PublicLDAP.ldapaccept]> PublicLDAP.ldapaccept

Enter the LDAP query string:
[(proxyAddresses=smtp:{a})]> (proxyAddresses=smtp:{a})

Do you want to test this query? [Y]> n

Name: PublicLDAP
Hostname: myldapserver.example.com Port 3268
Server Type: Active Directory
Authentication Type: password
Base: dc=example,dc=com
LDAPACCEPT: PublicLDAP.ldapaccept

Choose the operation you want to perform:
- SERVER - Change the server for the query.
- LDAPACCEPT - Configure whether a recipient address should be accepted or bounced/dropped.
- LDAPROUTING - Configure message routing.
- MASQUERADE - Configure domain masquerading.
- LDAPGROUP - Configure whether a sender or recipient is in a specified group.
- SMTPAUTH - Configure SMTP authentication.
- EXTERNALAUTH - Configure external authentication queries.
- ISQAUTH - Configure Spam Quarantine End-User Authentication Query.
- ISQALIAS - Configure Spam Quarantine Alias Consolidation Query.
[>] ldaprouting

Please create a name for this query:
[PublicLDAP.routing]> PublicLDAP.routing

Enter the LDAP query string:
[((mailLocalAddress={a}))> (mailLocalAddress={a})

The query requires one of the attributes below. Please make a selection.
1) Configure MAILROUTINGADDRESS only - Rewrite the Envelope Recipient (and leave MAILHOST unconfigured)?
2) Configure MAILHOST only - Send the messages to an alternate mail host (and leave MAILROUTINGADDRESS unconfigured)?
3) Configure both attributes
[>] 1

Enter the attribute which contains the full rfc822 email address for the recipients.
[mailRoutingAddress]> mailRoutingAddress

Do you want to test this query? [Y]> n

Name: PublicLDAP
Hostname: myldapserver.example.com Port 3268
Server Type: Active Directory
Authentication Type: password
Base: dc=example,dc=com
LDAPACCEPT: PublicLDAP.ldapaccept
LDAPROUTING: PublicLDAP.routing

Choose the operation you want to perform:
- SERVER - Change the server for the query.
- LDAPACCEPT - Configure whether a recipient address should be accepted or bounced/dropped.
- LDAPROUTING - Configure message routing.
- MASQUERADE - Configure domain masquerading.
- LDAPGROUP - Configure whether a sender or recipient is in a specified group.
- SMTPAUTH - Configure SMTP authentication.
- EXTERNALAUTH - Configure external authentication queries.
- ISQAUTH - Configure Spam Quarantine End-User Authentication Query.
- ISQALIAS - Configure Spam Quarantine Alias Consolidation Query.
[>] masquerade

Please create a name for this query:
[PublicLDAP.masquerade]> PublicLDAP.masquerade

Enter the LDAP query string:
[((mailRoutingAddress={a})]> (mailRoutingAddress={a})

Enter the attribute which contains the externally visible full rfc822 email address.
[>] mailLocalAddress

Do you want the results of the returned attribute to replace the entire friendly portion of the original recipient? [N]> n

Do you want to test this query? [Y]> n

Name: PublicLDAP
Hostname: myldapserver.example.com Port 3268
Server Type: Active Directory
Authentication Type: password
Base: dc=example,dc=com
LDAPACCEPT: PublicLDAP.ldapaccept
LDAPROUTING: PublicLDAP.routing
Choose the operation you want to perform:
- SERVER - Change the server for the query.
- LDAPACCEPT - Configure whether a recipient address should be accepted or bounced/dropped.
- LDAPROUTING - Configure message routing.
- MASQUERADE - Configure domain masquerading.
- LDAPGROUP - Configure whether a sender or recipient is in a specified group.
- SMTPAUTH - Configure SMTP authentication.
- EXTERNALAUTH - Configure external authentication queries.
- ISQAUTH - Configure Spam Quarantine End-User Authentication Query.
- ISQALIAS - Configure Spam Quarantine Alias Consolidation Query.

LDAP

Choose the operation you want to perform:
- SERVER - Change the server for the query.
- LDAPACCEPT - Configure whether a recipient address should be accepted or bounced/dropped.
- LDAPROUTING - Configure message routing.
- MASQUERADE - Configure domain masquerading.
- LDAPGROUP - Configure whether a sender or recipient is in a specified group.
- SMTPAUTH - Configure SMTP authentication.
- EXTERNALAUTH - Configure external authentication queries.
- ISQAUTH - Configure Spam Quarantine End-User Authentication Query.
- ISQALIAS - Configure Spam Quarantine Alias Consolidation Query.

Choose the operation you want to perform:
- SERVER - Change the server for the query.
- LDAPACCEPT - Configure whether a recipient address should be accepted or bounced/dropped.
- LDAPROUTING - Configure message routing.
- MASQUERADE - Configure domain masquerading.
- LDAPGROUP - Configure whether a sender or recipient is in a specified group.
- SMTPAUTH - Configure SMTP authentication.
- EXTERNALAUTH - Configure external authentication queries.
- ISQAUTH - Configure Spam Quarantine End-User Authentication Query.
- ISQALIAS - Configure Spam Quarantine Alias Consolidation Query.

LDAP

Please create a name for this query:
[PublicLDAP.isqauth] > PublicLDAP.isqauth

Enter the LDAP query string:
[(sAMAccountName={u})] > (sAMAccountName={u})

Enter the list of email attributes.
[> mail,proxyAddresses]

Do you want to activate this query? [Y] > Y

Do you want to test this query? [Y] > Y

User identity to use in query:
[> admin@example.com]

Password to use in query:
[> password]

LDAP query test results:
LDAP Server: myldapserver.example.com
Query: PublicLDAP.isqauth
User: admin@example.com
Action: match positive

LDAP query test finished.

Name: PublicLDAP
Hostname: myldapserver.example.com Port 3268
Server Type: Active Directory
Authentication Type: password
Base: dc=example,dc=com
LDAPACCEPT: PublicLDAPldapaccept
LDAPROUTING: PublicLDAP.routing
MASQUERADE: PublicLDAP.masquerade
ISQAUTH: PublicLDAP.isqauth [active]

Choose the operation you want to perform:
- SERVER - Change the server for the query.
- LDAPACCEPT - Configure whether a recipient address should be accepted or bounced/dropped.
- LDAPROUTING - Configure message routing.
- MASQUERADE - Configure domain masquerading.
- LDAPGROUP - Configure whether a sender or recipient is in a specified group.
- SMTPAUTH - Configure SMTP authentication.
- EXTERNALAUTH - Configure external authentication queries.
- ISQAUTH - Configure Spam Quarantine End-User Authentication Query.
- ISQALIAS - Configure Spam Quarantine Alias Consolidation Query.

[> ]
Current LDAP server configurations:
1. Public LDAP: (myldapserver.example.com:3268)

Choose the operation you want to perform:
- NEW - Create a new server configuration.
- SETUP - Configure LDAP options.
- EDIT - Modify a server configuration.
- DELETE - Remove a server configuration.

Example - Configuring Global Settings

In the following example, the LDAP global settings are configured, including the certificate for TLS connections.

mail3.example.com> ldapconfig

No LDAP server configurations.

Choose the operation you want to perform:
- NEW - Create a new server configuration.
- SETUP - Configure LDAP options.

ldapflush

Description
Flush any cached LDAP results.
Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format

Example

mail3.example.com> ldapflush
Are you sure you want to flush any cached LDAP results? [N]> y
Flushing cache
mail3.example.com>

ldaptest

Description

Perform a single LDAP query test

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format

Example

In this example, the ldaptest command is used to test the only recipient acceptance query for the configured LDAP server configuration. The recipient address “admin@example.com” passes the test, while the recipient address “bogus@example.com” fails.

mail3.example.com> ldaptest
Select which LDAP query to test:
  1. PublicLDAP.ldapaccept
[1]> 1
Address to use in query:
[ ] > admin@example.com

LDAP query test results:

  Query: PublicLDAP.ldapaccept
  Argument: admin@example.com
  Action: pass

LDAP query test finished.
mail3.example.com> ldaptest
Select which LDAP query to test:
  1. PublicLDAP.ldapaccept
[1]> 1


Address to use in query:
[]> bogus@example.com

LDAP query test results:
Query: PublicLDAP.ldapaccept
Argument: bogus@example.com
Action: drop or bounce (depending on listener settings)
Reason: no matching LDAP record was found
LDAP query test finished.

mail3.example.com> sievechar

Description
Sets or disables the character used for Sieve Email Filtering, as described in RFC 3598. Note that the Sieve Character is ONLY recognized in LDAP Accept and LDAP Reroute queries. Other parts of the system will operate on the complete email address.
Allowable characters are: -_=+/^#

Usage
Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format

Example
In this example, the sievechar command is used to define + as the sieve character recognized in Accept and LDAP Reroute queries.

mail3.example.com> sievechar
Sieve Email Filtering is currently disabled.

Choose the operation you want to perform:
- SETUP - Set the separator character.
[]> setup

Enter the Sieve Filter Character, or a space to disable Sieve Filtering.
[]> +
Sieve Email Filter is enabled, using the ‘+’ character as separator. This applies only to LDAP Accept and LDAP Reroute Queries.

Choose the operation you want to perform:
- SETUP - Set the separator character.
[]>
Mail Delivery Configuration/Monitoring

This section contains the following CLI commands:

- addresslistconfig
- aliasconfig
- archivemessage
- altsrchost
- bounceconfig
- bouncerecipients
- bvconfig
- deleterecipients
- deliveryconfig
- delivernow
- destconfig
- hostrate
- hoststatus
- imageanalysisconfig
- oldmessage
- rate
- redirectrecipients
- resetcounters
- removemessage
- showmessage
- showrecipients
- status
- tophosts
- topin
- unsubscribe
- workqueue

**addresslistconfig**

**Description**

Configure address lists.

**Usage**

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command supports a batch format.

**Batch Format**

The batch format for the `addresslistconfig` command can be used to create a new address list, edit an existing address list, print a list of address lists, delete an address list, or find conflicting addresses within an address list.

- Adding a new address list:
  
  ```
  addresslistconfig new <name> --descr=<description> --addresses=<address1,address2,...>
  ```

- Editing an existing address list:
  
  ```
  addresslistconfig edit <name> --name=<new-name> --descr=<description> --addresses=<address1,address2,...>
  ```

- Deleting an address list:
  
  ```
  addresslistconfig delete <name>
  ```

- Printing a list of address lists:
  
  ```
  addresslistconfig print <name>
  ```

- Finding conflicting addresses within an address list:
  
  ```
  addresslistconfig conflicts <name>
  ```

**Example**

```
mail.example.com> addresslistconfig

No address lists configured.

Choose the operation you want to perform:
- NEW - Create a new address list.
[>] new

Enter a name for the address list:
  > add-list1

Enter a description for the address list:
  > This is a sample address list.

Do you want to enter only full Email Addresses? [N] > Y

Enter a comma separated list of addresses:
(e.g.: user@example.com)
  > user1@example.com, user2@example.com
```
Address list "add-list1" added.

Choose the operation you want to perform:
- NEW - Create a new address list.
- EDIT - Modify an address list.
- DELETE - Remove an address list.
- PRINT - Display the contents of an address list.
- CONFLICTS - Find conflicting entries within an address list.

aliasconfig

Description

Configure email aliases.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command supports a batch format.

Batch Format

The batch format of the aliasconfig command can be used to add a new alias table, edit an existing table, print a list of email aliases, and import/export alias table. To invoke as a batch command, use the following format of the aliasconfig command with the variables listed below:

- Adding a new email alias:

  aliasconfig new <domain> <alias> [email_address1] [email_address2] ...

  Note: Using the ‘aliasconfig new’ command with a non-existant domain causes the domain to be created.

- Editing an existing email alias

  aliasconfig edit <domain> <alias> <email_address1> [email_address2] ...

- Displaying an email alias:

  aliasconfig print

- Importing a local alias listing:

  aliasconfig import <filename>
• Exporting an alias listing on the appliance:

```
aliasconfig export <filename>
```

**Example**

```
mail3.example.com> aliasconfig
Enter address(es) for "customercare".
Separate multiple addresses with commas.
[1]> bob@example.com, frank@example.com, sally@example.com

Adding alias customercare: bob@example.com, frank@example.com, sally@example.com
Do you want to add another alias? [N]> n

There are currently 1 mappings defined.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- PRINT - Display the table.
- IMPORT - Import aliases from a file.
- EXPORT - Export table to a file.
- CLEAR - Clear the table.
[1]> new

How do you want your aliases to apply?
1. Globally
2. Add a new domain context
3. example.com
[1]> 1

Enter the alias(es) to match on.
Separate multiple aliases with commas.
Allowed aliases:
- "user@domain" - This email address.
- "user" - This user for any domain
- "@domain" - All users in this domain.
- "@.partialdomain" - All users in this domain, or any of its sub domains.
[1]> admin

Enter address(es) for "admin".
Separate multiple addresses with commas.
[1]> administrator@example.com

Adding alias admin: administrator@example.com
Do you want to add another alias? [N]> n

There are currently 2 mappings defined.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- PRINT - Display the table.
- IMPORT - Import aliases from a file.
- EXPORT - Export table to a file.
- CLEAR - Clear the table.
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Chapter 3  The Commands: Reference Examples

Mail Delivery Configuration/Monitoring

[> print

admin: administrator@example.com

[ example.com ]
customercare: bob@example.com, frank@example.com, sally@example.com

There are currently 2 mappings defined.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- PRINT - Display the table.
- IMPORT - Import aliases from a file.
- EXPORT - Export table to a file.
- CLEAR - Clear the table.

[> archivemessage

Description

Archive older messages in your queue.

Usage

Commit: This command does not require a commit.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

In the following example, an older message is archived:

```
mail3.example.com> archivemessage
Enter the MID to archive.
[0]> 47
MID 47 has been saved in file oldmessage_47.mbox in the configuration
```

altsrchost

Description

Configure Virtual Gateway (tm) mappings.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

In the following example, the altsrchost table is printed to show that there are no existing mappings. Two entries are then created:

- Mail from the groupware server host named @exchange.example.com is mapped to the PublicNet interface.
- Mail from the sender IP address of 192.168.35.35 is mapped to the AnotherPublicNet interface.

Finally, the altsrchost mappings are printed to confirm and the changes are committed.

```
mail3.example.com> altsrchost
There are currently no mappings configured.
Choose the operation you want to perform:
- NEW - Create a new mapping.
- IMPORT - Load new mappings from a file.
[] > new
Enter the Envelope From address or client IP address for which you want to set up a Virtual Gateway mapping. Partial addresses such as "@example.com" or "user@" are allowed.
[] > @exchange.example.com
Which interface do you want to send messages for @exchange.example.com from?
1. AnotherPublicNet (192.168.2.2/24: mail4.example.com)
2. Management (192.168.42.42/24: mail3.example.com)
```
3. PrivateNet (192.168.1.1/24: mail3.example.com)
4. PublicNet (192.168.2.1/24: mail4.example.com)

[1]> 4

Mapping for @exchange.example.com on interface PublicNet created.

Choose the operation you want to perform:
- NEW - Create a new mapping.
- EDIT - Modify a mapping.
- DELETE - Remove a mapping.
- IMPORT - Load new mappings from a file.
- EXPORT - Export all mappings to a file.
- PRINT - Display all mappings.
- CLEAR - Remove all mappings.

[1]> new

Enter the Envelope From address or client IP address for which you want to set up a
Virtual Gateway mapping. Partial addresses such as "@example.com" or "user" are allowed.

[1]> 192.168.35.35

Which interface do you want to send messages for 192.168.35.35 from?
1. AnotherPublicNet (192.168.2.2/24: mail4.example.com)
2. Management (192.168.42.42/24: mail3.example.com)
3. PrivateNet (192.168.1.1/24: mail3.example.com)
4. PublicNet (192.168.2.1/24: mail4.example.com)

[1]> 1

Mapping for 192.168.35.35 on interface AnotherPublicNet created.

Choose the operation you want to perform:
- NEW - Create a new mapping.
- EDIT - Modify a mapping.
- DELETE - Remove a mapping.
- IMPORT - Load new mappings from a file.
- EXPORT - Export all mappings to a file.
- PRINT - Display all mappings.
- CLEAR - Remove all mappings.

[1]> print

1. 192.168.35.35 -> AnotherPublicNet
2. @exchange.example.com -> PublicNet

Choose the operation you want to perform:
- NEW - Create a new mapping.
- EDIT - Modify a mapping.
- DELETE - Remove a mapping.
- IMPORT - Load new mappings from a file.
- EXPORT - Export all mappings to a file.
- PRINT - Display all mappings.
- CLEAR - Remove all mappings.

[1]> mail3.example.com> commit

Please enter some comments describing your changes:

[1]> Added 2 altsrchost mappings

Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT
**bounceconfig**

**Description**

Configure the behavior of bounces.

**Usage**

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

**Example**

In the following example, a bounce profile named `bounceprofile` is created using the `bounceconfig` command. In this profile, all hard bounced messages are sent to the alternate address `bounce-mailbox@example.com`. Delay warnings messages are enabled. One warning message will be sent per recipient, and the default value of 4 hours (14400 seconds) between warning messages is accepted

```
mail3.example.com> bounceconfig
Current bounce profiles:
1. Default

Choose the operation you want to perform:
- NEW - Create a new profile.
- EDIT - Modify a profile.
[]> new

Please create a name for the profile:
[]> bounceprofile

Please enter the maximum number of retries.
[100]> 100

Please enter the maximum number of seconds a message may stay in the queue before being hard bounced.
[259200]> 259200

Please enter the initial number of seconds to wait before retrying a message.
[60]> 60

Please enter the maximum number of seconds to wait before retrying a message.
[3600]> 3600

Do you want a message sent for each hard bounce? (Yes/No/Default) [Y]> y

Do you want bounce messages to use the DSN message format? (Yes/No/Default) [Y]> y

If a message is undeliverable after some interval, do you want to send a delay warning message? (Yes/No/Default) [N]> y

Please enter the minimum interval in seconds between delay warning messages.
[14400]> 14400
```
Please enter the maximum number of delay warning messages to send per recipient.
[1]> 1

Do you want hard bounce and delay warning messages sent to an alternate address, instead of the sender? [N]> y

Please enter the email address to send hard bounce and delay warning.
[]> bounce-mailbox@example.com

Current bounce profiles:
1. Default
2. bounceprofile

Choose the operation you want to perform:
- NEW - Create a new profile.
- EDIT - Modify a profile.
- DELETE - Remove a profile.
[]>
mail3.example.com>

Editing the Default Bounce Profile

You can also edit the default bounce profile. In this example, the default profile is edited to increase the maximum number of seconds to wait before retrying unreachable hosts from 3600 (one hour) to 10800 (three hours):

mail3.example.com> bounceconfig

Current bounce profiles:
1. Default
2. bounceprofile

Choose the operation you want to perform:
- NEW - Create a new profile.
- EDIT - Modify a profile.
- DELETE - Remove a profile.
[]> edit

Please enter the number of the profile to edit:
[]> 2

Please enter the maximum number of retries.
[100]>

Please enter the maximum number of seconds a message may stay in the queue before being hard bounced.
[259200]>

Please enter the initial number of seconds to wait before retrying a message.
[60]>

Please enter the maximum number of seconds to wait before retrying a message.
[3600] > 10800

Do you want a message sent for each hard bounce? (Yes/No/Default)[Y]>

Do you want bounce messages to use the DSN message format? (Yes/No/Default) [N]>

If a message is undeliverable after some interval, do you want to send a delay warning message? (Yes/No/Default) [N]>
Do you want hard bounce messages sent to an alternate address, instead of the sender? [Y]>

Please enter the email address to send hard bounce.
[bounce-mailbox@example.com]>

Current bounce profiles:
1. Default
2. bounceprofile

Choose the operation you want to perform:
- NEW - Create a new profile.
- EDIT - Modify a profile.
- DELETE - Remove a profile.

Applying a Bounce Profile to a Listener

After a bounce profile has been configured, you can apply the profile for each listener using the listenerconfig → bounceconfig command and then committing the changes.

Note

Bounce profiles can be applied based upon the listener that a message was received on. However, this listener has nothing to do with how the message is ultimately delivered.

In this example, the OutboundMail private listener is edited and the bounce profile named bouncepr1 is applied to it.

mail3.example.com> listenerconfig

Currently configured listeners:
1. InboundMail (on PublicNet, 192.168.2.1) SMTP Port 25 Public
2. OutboundMail (on PrivateNet, 192.168.1.1) SMTP Port 25 Private

Choose the operation you want to perform:
- NEW - Create a new listener.
- EDIT - Modify a listener.
- DELETE - Remove a listener.
- SETUP - Change global settings.

[]> edit

Enter the name or number of the listener you wish to edit.
[]> 2

Name: OutboundMail
Type: Private
Interface: PrivateNet (192.168.1.1/24) TCP Port 25
Protocol: SMTP
Default Domain:
Max Concurrency: 600 (TCP Queue: 50)
Domain Map: Disabled
TLS: No
SMTP Authentication: Disabled
Bounce Profile: Default
Footer: None
LDAP: Off

Choose the operation you want to perform:
- NAME - Change the name of the listener.
- INTERFACE - Change the interface.
- LIMITS - Change the injection limits.
- SETUP - Configure general options.
- HOSTACCESS - Modify the Host Access Table.
- BOUNCECONFIG - Choose the bounce profile to use for messages injected on this listener.
- MASQUERADE - Configure the Domain Masquerading Table.
- DOMAINMAP - Configure domain mappings.

```bash
[]> bounceconfig
```

Please choose a bounce profile to apply:
1. Default
2. bouncepr1
3. New Profile

```bash
[1]> 2
```

Name: OutboundMail
Type: Private
Interface: PrivateNet (192.168.1.1/24) TCP Port 25
Protocol: SMTP
Default Domain:
Max Concurrency: 600 (TCP Queue: 50)
Domain Map: Disabled
TLS: No
SMTP Authentication: Disabled
Bounce Profile: bouncepr1
Footer: None
LDAP: Off

Choose the operation you want to perform:
- NAME - Change the name of the listener.
- INTERFACE - Change the interface.
- LIMITS - Change the injection limits.
- SETUP - Configure general options.
- HOSTACCESS - Modify the Host Access Table.
- BOUNCECONFIG - Choose the bounce profile to use for messages injected on this listener.
- MASQUERADE - Configure the Domain Masquerading Table.
- DOMAINMAP - Configure domain mappings.

```bash
[]>
```

Currently configured listeners:
1. InboundMail (on PublicNet, 192.168.2.1) SMTP Port 25 Public
2. OutboundMail (on PrivateNet, 192.168.1.1) SMTP Port 25 Private

Choose the operation you want to perform:
- NEW - Create a new listener.
- EDIT - Modify a listener.
- DELETE - Remove a listener.
- SETUP - Change global settings.

```bash
[]>
```

```bash
mail3.example.com> commit
```

Please enter some comments describing your changes:

```bash
[1]> Enabled the bouncepr1 profile to the Outbound mail listener
```

Do you want to save the current configuration for rollback? [Y]> n

Changes committed: Fri May 23 11:42:12 2014 GMT

---

**bouncerecipients**

**Description**

Bounce messages from the queue.
Usage

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format

Example

Recipients to be bounced are identified by either the destination recipient host or the message sender identified by the specific address given in the Envelope From line of the message envelope. Alternately, all messages in the delivery queue can be bounced at once.

**Bounce by Recipient Host**

```
mail3.example.com> bouncerecipients

Please select how you would like to bounce messages:
1. By recipient host.
2. By Envelope From address.
3. All.
[1]> 1

Please enter the hostname for the messages you wish to bounce.
[]> example.com

Are you sure you want to bounce all messages being delivered to "example.com"? [N]> Y

Bouncing messages, please wait.
100 messages bounced.
```

**Bounce by Envelope From Address**

```
mail3.example.com> bouncerecipients

Please select how you would like to bounce messages:
1. By recipient host.
2. By Envelope From address.
3. All.
[1]> 2

Please enter the Envelope From address for the messages you wish to bounce.
[]> mailadmin@example.com

Are you sure you want to bounce all messages with the Envelope From address of "mailadmin@example.com"? [N]> Y

Bouncing messages, please wait.
100 messages bounced.
```

**Bounce All**

```
mail3.example.com> bouncerecipients

Please select how you would like to bounce messages:
1. By recipient host.
2. By Envelope From address.
3. All.
[1]> 
```
Are you sure you want to bounce all messages in the queue? [N] > Y

Bouncing messages, please wait.
1000 messages bounced.

**bvconfig**

**Description**

Configure settings for Bounce Verification. Use this command to configure keys and invalid bounced emails.

**Usage**

**Commit**: This command requires a ‘commit’.

**Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).

**Batch Command**: This command does not support a batch format.

**Example**

The following example shows key configuration and settings configured for invalid bounced emails.

```
mail3.example.com> bvconfig

Behavior on invalid bounces: reject

Key for tagging outgoing mail: key

Previously-used keys for verifying incoming mail:
   1. key (current outgoing key)
   2. goodneighbor (last in use Wed May 31 23:22:49 2006 GMT)

Choose the operation you want to perform:
   - KEY - Assign a new key for tagging outgoing mail.
   - PURGE - Purge keys no longer needed for verifying incoming mail.
   - CLEAR - Clear all keys including current key.
   - SETUP - Set how invalid bounces will be handled.
   [] > key

Enter the key to tag outgoing mail with (when tagging is enabled in the Good Neighbor Table)
   [] > basic_key

Behavior on invalid bounces: reject

Key for tagging outgoing mail: basic_key

Previously-used keys for verifying incoming mail:
   1. basic_key (current outgoing key)
   2. key (last in use Wed May 31 23:22:49 2006 GMT)
   3. goodneighbor (last in use Wed May 31 23:21:01 2006 GMT)
```
Choose the operation you want to perform:
- **KEY** - Assign a new key for tagging outgoing mail.
- **PURGE** - Purge keys no longer needed for verifying incoming mail.
- **CLEAR** - Clear all keys including current key.
- **SETUP** - Set how invalid bounces will be handled.

[]> setup

How do you want bounce messages which are not addressed to a valid tagged recipient to be handled?
1. Reject.
2. Add a custom header and deliver.
[1]> 1

Behavior on invalid bounces: reject

Key for tagging outgoing mail: basic_key

Previously-used keys for verifying incoming mail:

1. basic_key (current outgoing key)
2. key (last in use Wed May 31 23:22:49 2006 GMT)
3. goodneighbor (last in use Wed May 31 23:21:01 2006 GMT)

Choose the operation you want to perform:
- **KEY** - Assign a new key for tagging outgoing mail.
- **PURGE** - Purge keys no longer needed for verifying incoming mail.
- **CLEAR** - Clear all keys including current key.
- **SETUP** - Set how invalid bounces will be handled.

[]> mail3.example.com> commit

Please enter some comments describing your changes:
[]> Configuring a new key and setting reject for invalid email bounces

Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT

deleterecipients

**Description**

Delete messages from the queue

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format

**Example**

The appliance gives you various options to delete recipients depending upon the need. The following example show deleting recipients by recipient host, deleting by Envelope From Address, and deleting all recipients in the queue.
Delete by Recipient Domain

```
mail3.example.com> deleterecipients

Please select how you would like to delete messages:
1. By recipient host.
2. By Envelope From address.
3. All.
[1]> 1
Please enter the hostname for the messages you wish to delete.
[]> example.com

Are you sure you want to delete all messages being delivered to "example.com"? [N]> Y

Deleting messages, please wait.
100 messages deleted.
```

Delete by Envelope From Address

```
mail3.example.com> deleterecipients

Please select how you would like to delete messages:
1. By recipient host.
2. By Envelope From address.
3. All.
[1]> 2
Please enter the Envelope From address for the messages you wish to delete.
[ ]> mailadmin@example.com

Are you sure you want to delete all messages with the Envelope From address of "mailadmin@example.com"? [N]> Y

Deleting messages, please wait.
100 messages deleted.
```

Delete All

```
mail3.example.com> deleterecipients

Please select how you would like to delete messages:
1. By recipient host.
2. By Envelope From address.
3. All.
[1]> 1
Are you sure you want to delete all messages in the queue? [N]> Y

Deleting messages, please wait.
1000 messages deleted.
```

deliveryconfig

Description

Configure mail delivery
Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format.

Example

In the following example, the `deliveryconfig` command is used to set the default interface to “Auto” with “Possible Delivery” enabled. The system-wide maximum outbound message delivery is set to 9000 connections.

```
mail3.example.com> deliveryconfig
Choose the operation you want to perform:
- SETUP - Configure mail delivery.
[]> setup
Choose the default interface to deliver mail.
1. Auto
2. AnotherPublicNet (192.168.3.1/24: mail4.example.com)
3. Management (192.168.42.42/24: mail3.example.com)
4. PrivateNet (192.168.1.1/24: mail3.example.com)
5. PublicNet (192.168.2.1/24: mail3.example.com)
[]> 1
Enable "Possible Delivery" (recommended)? [Y]> y
Please enter the default system wide maximum outbound message delivery concurrency
[]> 10000> 9000
```

`delivernow`

Description

Reschedule messages for immediate delivery. Users have the option of selecting a single recipient host, or all messages currently scheduled for delivery.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode.

Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> delivernow
Please choose an option for scheduling immediate delivery.
```
1. By recipient domain
2. All messages

[1]> 1

Please enter the recipient domain to schedule for delivery.

[1]> foo.com

Scheduling all messages to foo.com for delivery.

destconfig

Formerly the setgoodtable command. The table is now called the Destination Control Table. Use this table to configure delivery limits for a specified domain.

Using the destconfig Command

The following commands are available within the destconfig submenu:

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SETUP</td>
<td>Change global settings.</td>
</tr>
<tr>
<td>NEW</td>
<td>Add new limits for a domain.</td>
</tr>
<tr>
<td>EDIT</td>
<td>Modify the limits for a domain.</td>
</tr>
<tr>
<td>DELETE</td>
<td>Remove the limits for a domain.</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>Change the default limits for non-specified domains.</td>
</tr>
<tr>
<td>LIST</td>
<td>Display the list of domains and their limits.</td>
</tr>
<tr>
<td>DETAIL</td>
<td>Display the details for one destination or all entries.</td>
</tr>
<tr>
<td>CLEAR</td>
<td>Remove all entries from the table.</td>
</tr>
<tr>
<td>IMPORT</td>
<td>Imports a table of destination control entries from a .INI configuration file.</td>
</tr>
<tr>
<td>EXPORT</td>
<td>Exports a table of destination control entries to a .INI configuration file.</td>
</tr>
</tbody>
</table>

The destconfig command requires the following information for each row in the Destination Controls table:

- Domain (recipient host)
- Maximum simultaneous connections to the domain
- Messages-per-connection limit
- Recipient limit
- System-wide or Virtual Gateway switch
- Enforce limits per MX or domain
- Time period for recipient limit (in minutes)
- Bounce Verification
- Bounce profile to use for the domain
Sample Destination Control Table

The following table shows entries in a destination control table.

Table 3-8   Example Destination Control Table Entries

<table>
<thead>
<tr>
<th>Domain</th>
<th>Conn. Limit</th>
<th>Rcpt. Limit</th>
<th>Min. Prd.</th>
<th>Enforce MX/DOM</th>
</tr>
</thead>
<tbody>
<tr>
<td>(default)</td>
<td>500</td>
<td>None</td>
<td>1</td>
<td>Domain</td>
</tr>
</tbody>
</table>
| Unlisted domains get their own set of 500 connections with unlimited rcpts/hr
| (default)      | 500         | None        | 1         | MXIP           |
| Mail gateways at unlisted domains get up to 500 connections, with unlimited rcpts/hr
| partner.com    | 10          | 500         | 60        | Domain         |
| All gateways at partner.com will share 10 connections, with 500 rcpts/minute maximum
| 101.202.101.2  | 500         | None        | 0         | MXIP           |

Specifying an IP address

Batch Format

The batch format of the `destconfig` command can be used to perform all the functions of the traditional CLI command.

- Creating a new destination control table

  `destconfig new <profile> [options]`

- Editing an existing destination control table

  `destconfig edit <default|profile> [options]`

- Deleting an existing destination control table

  `destconfig delete <profile>`

- Displaying a summary of all destination control entries

  `destconfig list`

- Displaying details for one destination or all entries

  `destconfig detail <default|profile|all>`

- Deleting all existing destination control table entries

  `destconfig clear`
- Import table from a file
  
  `destconfig import <filename>`

- Export table to a file
  
  `destconfig export <filename>`

For the `edit` and `new` batch commands, any or all of the following options may be provided by identifying the value with the variable name and an equals sign. Options not specified will not be modified (if using `edit`) or will be set to default values (if using `new`).

- `concurrency_limit=<int>` - The maximum concurrency for a specific host.
- `concurrency_limit_type=host|MXIP` - Maximum concurrency is per host or per MX IP.
- `concurrency_limit_apply=system|VG` - Apply maximum concurrency is system wide or by Virtual Gateway (tm).
- `max_messages_per_connection=<int>` - The maximum number of messages that will be sent per connection.
- `recipient_limit_minutes=<int>` - The time frame to check for recipient limits in minutes.
- `recipient_limit=<int>` - The number of recipients to limit per unit of time.
- `use_tls=off|on|required|on_verify|required_verify` - Whether TLS should be on, off, or required for a given host.
- `bounce_profile=default|profile` - The bounce profile name to use.
- `bounce_verification=off|on` - Bounce Verification option.

### Example: Creating a new destconfig Entry

In the following example, the current `destconfig` entries are printed to the screen. Then, a new entry for the domain `partner.com` is created. The concurrency limit of 100 simultaneous connections and recipient limit of 50 recipients for a 60-minute time period is set for that domain. So, the system will never open more than 100 connections or deliver to more than more than 50 recipients in a given hour to the domain `partner.com`. No bounce profile is assigned for this specific domain, and no specific TLS setting is configured. Finally, the changes are printed to confirm and then committed.

```
mail3.example.com> destconfig

There are currently 2 entries configured.

Choose the operation you want to perform:
- SETUP - Change global settings.
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- DEFAULT - Change the default.
```
- LIST - Display a summary list of all entries.
- DETAIL - Display details for one destination or all entries.
- CLEAR - Remove all entries.
- IMPORT - Import tables from a file.
- EXPORT - Export tables to a file.

[]> list

l

Rate               Bounce        Bounce
Domain     Limiting  TLS      Verification  Profile
=========  ========  =======  ============  =========
(Default)  On        Off      Off           (Default)

Choose the operation you want to perform:
- SETUP - Change global settings.
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- DEFAULT - Change the default.
- LIST - Display a summary list of all entries.
- DETAIL - Display details for one destination or all entries.
- CLEAR - Remove all entries.
- IMPORT - Import tables from a file.
- EXPORT - Export tables to a file.

[]> new

Enter the domain you wish to configure.

[]> partner.com

Do you wish to configure a concurrency limit for partner.com? [Y]> y

Enter the max concurrency limit for "partner.com".
[500]> 100

Do you wish to apply a messages-per-connection limit to this domain? [N]> n

Do you wish to apply a recipient limit to this domain? [N]> y

Enter the number of minutes used to measure the recipient limit.
[60]> 60

Enter the max number of recipients per 60 minutes for "partner.com".
[]> 50

Select how you want to apply the limits for partner.com:
1. One limit applies to the entire domain for partner.com
2. Separate limit for each mail exchanger IP address
[1]> 1

Select how the limits will be enforced:
1. System Wide
2. Per Virtual Gateway(tm)
[1]> 1

Do you wish to apply a specific TLS setting for this domain? [N]> n

Do you wish to apply a specific bounce verification address tagging setting for this domain? [N]> n

Do you wish to apply a specific bounce profile to this domain? [N]> n
There are currently 3 entries configured.

mail3.example.com> commit

Please enter some comments describing your changes:
[>] Throttled delivery to partner.com in the destconfig table

Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT

Example: Bounce Profile and TLS Settings

In this example, a new destconfig entry is configured for the domain newpartner.com. TLS connections are required. The example also shows the bounce profile named bouncepr1 (see “Editing the Default Bounce Profile” on page 136) configured to be used for all email delivery to the domain newpartner.com.

mail3.example.com> destconfig

There is currently 1 entry configured.

Choose the operation you want to perform:
- SETUP - Change global settings.
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- DEFAULT - Change the default.
- LIST - Display a summary list of all entries.
- DETAIL - Display details for one destination or all entries.
- CLEAR - Remove all entries.
- IMPORT - Import tables from a file.
- EXPORT - Export tables to a file.
[>] new

Enter the domain you wish to configure.
[]> newpartner.com

Do you wish to configure a concurrency limit for newpartner.com? [Y]> n
Do you wish to apply a messages-per-connection limit to this domain? [N]> n
Do you wish to apply a recipient limit to this domain? [N]> n
Do you wish to apply a specific TLS setting for this domain? [N]> y

Do you want to use TLS support?
1. No
2. Preferred
3. Required
4. Preferred(Verify)
5. Required(Verify)
[1]> 3

You have chosen to enable TLS. Please use the 'certconfig' command to ensure that there is a valid certificate configured.

Do you wish to apply a specific bounce verification address tagging setting for this domain? [N]> y

Perform bounce verification address tagging? [N]> y

Do you wish to apply a specific bounce profile to this domain? [N]> y
Please choose a bounce profile to apply:
1. Default
2. New Profile

[1]> 1

There are currently 2 entries configured.

Choose the operation you want to perform:
- SETUP - Change global settings.
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- DEFAULT - Change the default.
- LIST - Display a summary list of all entries.
- DETAIL - Display details for one destination or all entries.
- CLEAR - Remove all entries.
- IMPORT - Import tables from a file.
- EXPORT - Export tables to a file.

[>] detail

<table>
<thead>
<tr>
<th>Domain</th>
<th>Rate Limiting</th>
<th>TLS</th>
<th>Bounce Verification</th>
<th>Bounce Profile</th>
</tr>
</thead>
<tbody>
<tr>
<td>newpartner.com</td>
<td>Default</td>
<td>Req</td>
<td>On</td>
<td>Default</td>
</tr>
<tr>
<td>(Default)</td>
<td>On</td>
<td>Off</td>
<td>Off</td>
<td>(Default)</td>
</tr>
</tbody>
</table>

Enter the domain name to view, or enter DEFAULT to view details for the default, or enter ALL to view details for all:

[>] all

newpartner.com
Maximum messages per connection: Default
Rate Limiting: Default
TLS: Required
Bounce Verification Tagging: On
Bounce Profile: Default

Default
Rate Limiting:
500 concurrent connections
No recipient limit
Limits applied to entire domain, across all virtual gateways
TLS: Off
Bounce Verification Tagging: Off

There are currently 2 entries configured.


mail3.example.com> commit

Please enter some comments describing your changes:

[>] enabled TLS for delivery to newpartner.com using demo certificate

Do you want to save the current configuration for rollback? [Y] > n

Changes committed: Fri May 23 11:42:12 2014 GMT
Example: Inbound “Shock Absorber”

In this example, another destconfig entry is created to throttle mail to the internal groupware server exchange.example.com. This “shock absorber” entry for your internal server throttles inbound delivery to your internal groupware servers during periods of especially high volume traffic. In this example, the appliance will never open more than ten simultaneous connections or deliver to more than 1000 recipients to the internal groupware server exchange.example.com in any given minute. No bounce profile or TLS setting is configured:

```
mail3.example.com> destconfig
```

There are currently 2 entries configured.

Choose the operation you want to perform:
- SETUP - Change global settings.
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- DEFAULT - Change the default.
- LIST - Display a summary list of all entries.
- DETAIL - Display details for one destination or all entries.
- CLEAR - Remove all entries.
- IMPORT - Import tables from a file.

```
[>] new
```

Enter the domain you wish to configure.
```
[>] exchange.example.com
```

Do you wish to configure a concurrency limit for exchange.example.com? [Y]>
```
y
```

Enter the max concurrency limit for "exchange.example.com".
```
[500]>
```
10
```

Do you wish to apply a recipient limit to this domain? [N]>
```
y
```

Enter the number of minutes used to measure the recipient limit.
```
[60]>
```
1

Enter the max number of recipients per minute for "exchange.example.com".
```
[1]>
```
1000
```

Select how you want to apply the limits for exchange.example.com:
1. One limit applies to the entire domain for exchange.example.com
2. Separate limit for each mail exchanger IP address
```
[1]>
```
1
```

Select how the limits will be enforced:
1. System Wide
2. Per Virtual Gateway(tm)
```
[1]>
```
1
```

Do you wish to apply a specific TLS setting for this domain? [N]>
```
n
```

Do you wish to apply a specific bounce verification address tagging setting for this domain? [N]>
```
n
```

Do you wish to apply a specific bounce profile to this domain? [N]>
```
n
```
```

There are currently 3 entries configured.

Choose the operation you want to perform:
- SETUP - Change global settings.
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- DEFAULT - Change the default.
- LIST - Display a summary list of all entries.
- DETAIL - Display details for one destination or all entries.
- CLEAR - Remove all entries.
- IMPORT - Import tables from a file.
- CLEAR - Remove all entries.

mail3.example.com> commit

Please enter some comments describing your changes:

mail3.example.com> set up shock absorber for inbound mail

Do you want to save the current configuration for rollback? [Y]> n

Changes committed: Fri May 23 11:42:12 2014 GMT

Example: Global Settings

In this example, the TLS alert and certificate for TLS connections are configured.

mail3.example.com> destconfig

Choose the operation you want to perform:
- SETUP - Change global settings.
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- DEFAULT - Change the default.
- LIST - Display a summary list of all entries.
- DETAIL - Display details for one destination or all entries.
- CLEAR - Remove all entries.
- IMPORT - Import tables from a file.
- EXPORT - Export tables to a file.

mail3.example.com> setup

The "Demo" certificate is currently configured. You may use "Demo", but this will not be secure.

1. partner.com
2. Demo

Please choose the certificate to apply:

mail3.example.com> 1

Do you want to send an alert when a required TLS connection fails? [N]> n

hostrate

Description

Monitor activity for a particular host

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
**Batch Command:** This command does not support a batch format

**Example**

```
mail3.example.com> hostrate

Recipient host:
[] > aol.com

Enter the number of seconds between displays.
[10] > 1

<table>
<thead>
<tr>
<th>Time</th>
<th>Host Status</th>
<th>CrtCncOut</th>
<th>ActvRcp Delta</th>
<th>ActvRcp Delta</th>
<th>DlvRcp Delta</th>
<th>HrdBncRcp Delta</th>
<th>SftBncEvt Delta</th>
</tr>
</thead>
<tbody>
<tr>
<td>23:38:23</td>
<td>up</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>23:38:24</td>
<td>up</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>23:38:25</td>
<td>up</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

^C
```

Use Control-C to stop the `hostrate` command.

**hoststatus**

**Description**

Get the status of the given hostname.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format

**Example**

```
mail3.example.com> hoststatus

Recipient host:
[] > aol.com

Host mail status for: 'aol.com'
Status as of: Fri Aug 8 11:12:00 2003
Host up/down: up

Counters:
Queue
  Soft Bounced Events 0
Completion
  Completed Recipients 1
  Hard Bounced Recipients 1
  DNS Hard Bounces 0
  5XX Hard Bounces 1
  Filter Hard Bounces 0
  Expired Hard Bounces 0
```
Other Hard Bounces                     0
Delivered Recipients                  0
Deleted Recipients                    0

Gauges:
Queue
  Active Recipients                  0
  Unattempted Recipients             0
  Attempted Recipients               0
Connections
  Current Outbound Connections       0
  Pending Outbound Connections       0

Oldest Message                     No Messages
Last Activity          Fri Aug  8 11:04:24 2003
Ordered IP addresses: (expiring at Fri Aug  8 11:34:24 2003)

<table>
<thead>
<tr>
<th>Preference</th>
<th>IP Address</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>64.12.137.121</td>
<td>64.12.138.89</td>
<td>64.12.138.120</td>
</tr>
<tr>
<td>15</td>
<td>64.12.137.89</td>
<td>64.12.138.152</td>
<td>152.163.224.122</td>
</tr>
<tr>
<td>15</td>
<td>64.12.137.184</td>
<td>64.12.137.89</td>
<td>64.12.136.57</td>
</tr>
<tr>
<td>15</td>
<td>64.12.138.57</td>
<td>64.12.136.153</td>
<td>205.188.156.122</td>
</tr>
<tr>
<td>15</td>
<td>64.12.138.57</td>
<td>64.12.137.152</td>
<td>64.12.136.89</td>
</tr>
<tr>
<td>15</td>
<td>64.12.138.89</td>
<td>205.188.156.154</td>
<td>64.12.138.152</td>
</tr>
<tr>
<td>15</td>
<td>64.12.136.121</td>
<td>152.163.224.26</td>
<td>64.12.137.184</td>
</tr>
<tr>
<td>15</td>
<td>64.12.138.120</td>
<td>64.12.137.152</td>
<td>64.12.137.121</td>
</tr>
</tbody>
</table>

MX Records:

<table>
<thead>
<tr>
<th>Preference</th>
<th>TTL</th>
<th>Hostname</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>52m24s</td>
<td>mailin-01.mx.aol.com</td>
</tr>
<tr>
<td>15</td>
<td>52m24s</td>
<td>mailin-02.mx.aol.com</td>
</tr>
<tr>
<td>15</td>
<td>52m24s</td>
<td>mailin-03.mx.aol.com</td>
</tr>
<tr>
<td>15</td>
<td>52m24s</td>
<td>mailin-04.mx.aol.com</td>
</tr>
</tbody>
</table>

Last 5XX Error:
----------
550 REQUESTED ACTION NOT TAKEN: DNS FAILURE
(at Fri Aug  8 11:04:25 2003)
----------

Virtual gateway information:
----------------------------------------
example.com (PublicNet_017):
  Host up/down: up
  Last Activity: Wed Nov 13 13:47:02 2003
  Recipients: 0
----------------------------------------
example.com (PublicNet_023):
  Host up/down: up
  Last Activity: Wed Nov 13 13:45:01 2003
  Recipients: 

imageanalysisconfig

Description

Configure the IronPort Image Analysis settings
Mail Delivery Configuration/Monitoring

Chapter 3      The Commands: Reference Examples

Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format

Example

mail.example.com>imageanalysisconfig

IronPort Image Analysis: Enabled
Image Analysis Sensitivity: 65
Verdict Ranges: Clean (0-49), Suspect(50-74), Inappropriate (75+)
Skip small images with size less than 100 pixels (width or height)

(First time users see the license agreement displayed here.)

Choose the operation you want to perform:
- SETUP - Configure IronPort Image Analysis.
[>] setup

IronPort Image Analysis: Enabled
Would you like to use IronPort Image Analysis? [Y]

Define the image analysis sensitivity. Enter a value between 0 (least sensitive) and 100 (most sensitive). As sensitivity increases, so does the false positive rate. The default setting of 65 is recommended.
[65]

Define the range for a CLEAN verdict. Enter the upper bound of the CLEAN range by entering a value between 0 and 98. The default setting of 49 is recommended.
[49]

Define the range for a SUSPECT verdict. Enter the upper bound of the SUSPECT range by entering a value between 50 and 99. The default setting of 74 is recommended.
[74]

Would you like to skip scanning of images smaller than a specific size? [Y]

Please enter minimum image size to scan in pixels, representing either height or width of a given image.
[100]

IronPort Image Analysis: Enabled
Image Analysis Sensitivity: 65
Verdict Ranges: Clean (0-49), Suspect(50-74), Inappropriate (75+)
Skip small images with size less than 100 pixels (width or height)

Choose the operation you want to perform:
- SETUP - Configure IronPort Image Analysis.
[>]
oldmessage

Description
Displays the mid and headers of the oldest non-quarantine message on the system.

Usage

Commit: This command does not require a commit.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example
In the following example, an older messages are displayed:

click3.example.com> oldmessage
MID 9: 1 hour 5 mins 35 secs old
Received: from test02.com ([172.19.0.109])
by test02.com with SMTP; 14 Feb 2007 22:11:37 -0800
From: user123@test02.com
To: 4031@example.com
Subject: Testing
Message-Id: <20070215061136.68297.16346@test02.com

rate

Description
Monitor message throughput

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

click3.example.com> rate
Enter the number of seconds between displays.
[10]> 1
Hit Ctrl-C to return to the main prompt.
redirectrecipients

Description

Redirect all messages to another relay host.

⚠️ Warning

Redirecting messages to a receiving domain that has /dev/null as its destination results in the loss of messages. The CLI does not display a warning if you redirect mail to such a domain. Check the SMTP route for the receiving domain before redirecting messages.

⚠️ Warning

Redirecting recipients to a host or IP address that is not prepared to accept large volumes of SMTP mail from this host will cause messages to bounce and possibly result in the loss of mail.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode.

Batch Command: This command supports a batch format.

Batch Format

The batch format of the redirectrecipients command can be used to perform all the functions of the traditional CLI command.

- Redirects all mail to another host name or IP address

    redirectrecipients host <hostname>

Example

The following example redirects all mail to the example2.com host.

mail3.example.com> redirectrecipients

Please enter the hostname or IP address of the machine you want to send all mail to. [!] example2.com

WARNING: redirecting recipients to a host or IP address that is not prepared to accept large volumes of SMTP mail from this host will cause messages to bounce and possibly result in the loss of mail.
Are you sure you want to redirect all mail in the queue to "example2.com"? [N]> y

Redirecting messages, please wait.
246 recipients redirected.

resetcounters

Description

Reset all of the counters in the system

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail3.example.com> resetcounters

Counters reset: Mon Jan 01 12:00:01 2003

removemessage

Description

Attempts to safely remove a message for a given message ID.
The removemessage command can only remove messages that are in the work queue, retry queue, or a destination queue. Note that depending on the state of the system, valid and active messages may not be in any of those queues.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

e.example.com> removemessage

Enter the MID to remove.
[]> 1

MID 1: 19 secs old
showmessage

Description

Shows the message and message body for a specified message ID.

Usage

Commit: This command does not require a 'commit'.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

```
example.com> showmessage

MID 9: 1 hour 5 mins 35 secs old

Received: from example2.com ([172.19.0.109])
    by test02.com with SMTP; 14 Feb 2007 22:11:37 -0800
From: user123@test02.com
To: 4031@example.com
Subject: Testing
Message-Id: <20070215061136.68297.16346@test02.com>

This is the message body.
```
Batch Format

The batch format of the `showrecipients` command can be used to perform all the functions of the traditional CLI command.

- Find messages by a recipient host name

  
  `showrecipients host <hostname>`

- Find messages by an envelope from address

  
  `showrecipients [sender_options] <sender_email>`

The following sender_option is available:

- `--match-case` Case-sensitive matching for the username portion of an address.

- Find all messages

  
  `showrecipients all`

Example

The following example shows messages in the queue for all recipient hosts.

`mail3.example.com`> `showrecipients`

Please select how you would like to show messages:
1. By recipient host.
2. By Envelope From address.
3. All.
[1]> 3

Showing messages, please wait.

<table>
<thead>
<tr>
<th>MID/ [RID]</th>
<th>Bytes/ [Atmps]</th>
<th>Sender/ Recipient</th>
<th>Subject</th>
</tr>
</thead>
<tbody>
<tr>
<td>1527</td>
<td>1230</td>
<td><a href="mailto:user123456@ironport.com">user123456@ironport.com</a></td>
<td>Testing</td>
</tr>
<tr>
<td>[0]</td>
<td>[0]</td>
<td><a href="mailto:9554@example.com">9554@example.com</a></td>
<td></td>
</tr>
<tr>
<td>1522</td>
<td>1230</td>
<td><a href="mailto:user123456@ironport.com">user123456@ironport.com</a></td>
<td>Testing</td>
</tr>
<tr>
<td>[0]</td>
<td>[0]</td>
<td><a href="mailto:3059@example.com">3059@example.com</a></td>
<td></td>
</tr>
<tr>
<td>1529</td>
<td>1230</td>
<td><a href="mailto:user123456@ironport.com">user123456@ironport.com</a></td>
<td>Testing</td>
</tr>
<tr>
<td>[0]</td>
<td>[0]</td>
<td><a href="mailto:7284@example.com">7284@example.com</a></td>
<td></td>
</tr>
<tr>
<td>1530</td>
<td>1230</td>
<td><a href="mailto:user123456@ironport.com">user123456@ironport.com</a></td>
<td>Testing</td>
</tr>
<tr>
<td>[0]</td>
<td>[0]</td>
<td><a href="mailto:8243@example.com">8243@example.com</a></td>
<td></td>
</tr>
<tr>
<td>1532</td>
<td>1230</td>
<td><a href="mailto:user123456@ironport.com">user123456@ironport.com</a></td>
<td>Testing</td>
</tr>
<tr>
<td>[0]</td>
<td>[0]</td>
<td><a href="mailto:1820@example.com">1820@example.com</a></td>
<td></td>
</tr>
<tr>
<td>1531</td>
<td>1230</td>
<td><a href="mailto:user123456@ironport.com">user123456@ironport.com</a></td>
<td>Testing</td>
</tr>
<tr>
<td>[0]</td>
<td>[0]</td>
<td><a href="mailto:9595@example.com">9595@example.com</a></td>
<td></td>
</tr>
<tr>
<td>1518</td>
<td>1230</td>
<td><a href="mailto:user123456@ironport.com">user123456@ironport.com</a></td>
<td>Testing</td>
</tr>
<tr>
<td>[0]</td>
<td>[0]</td>
<td><a href="mailto:8778@example.com">8778@example.com</a></td>
<td></td>
</tr>
<tr>
<td>1535</td>
<td>1230</td>
<td><a href="mailto:user123456@ironport.com">user123456@ironport.com</a></td>
<td>Testing</td>
</tr>
</tbody>
</table>
The status command is used to display the system status of your appliance. Using the ‘detail’ option (status detail) displays additional information.

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

**Example**

```bash
mail.example.com> status detail

Status as of:                  Mon Sep 08 00:01:44 2014 GMT
Up since:                      Tue Aug 26 17:24:16 2014 GMT
(12d 6h 37m 28s)
Last counter reset:            Never
System status:                 Online
Oldest Message:                No Messages
Feature - IronPort Anti-Spam:  1459 days
Feature - Incoming Mail Handling: Perpetual
Feature - Outbreak Filters:    1459 days

Counters:                               Reset  Uptime  Lifetime
Receiving
  Messages Received                       2      2      2
  Recipients Received                     2      2      2
Rejection
  Rejected Recipients                     0      0      0
  Dropped Messages                        0      0      0
Queue
  Soft Bounced Events                     0      0      0
Completion
  Completed Recipients                    0      0      0
Current IDs
  Message ID (MID)                          2
  Injection Conn. ID (ICID)                0
  Delivery Conn. ID (DCID)                 13

Gauges:                                      Current
  Connections
    Current Inbound Conn.               0
    Current Outbound Conn.             0
  Queue
    Active Recipients                  2
    Messages In Work Queue              0
```
tophosts

Description

To get immediate information about the email queue and determine if a particular recipient host has delivery problems — such as a queue buildup — use the `tophosts` command. The `tophosts` command returns a list of the top 20 recipient hosts in the queue. The list can be sorted by a number of different statistics, including active recipients, connections out, delivered recipients, soft bounced events, and hard bounced recipients.

Usage

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format.

Example

```
mail3.example.com> tophosts

Sort results by:
1. Active Recipients
2. Connections Out
3. Delivered Recipients
4. Hard Bounced Recipients
5. Soft Bounced Events
[1]> 1

Status as of: Fri Mar 13 06:09:18 2015 GMT
Hosts marked with '*' were down as of the last delivery attempt.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1*</td>
<td>example.com</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>the.encryption.queue</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>the.euq.queue</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>the.euq.release.queue</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
```
### topin

**Description**

Display the top hosts by number of incoming connections

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format.

**Example**

```bash
mail3.example.com> topin
Status as of: Sat Aug 23 21:50:54 2003

<table>
<thead>
<tr>
<th>#</th>
<th>Remote hostname</th>
<th>Remote IP addr.</th>
<th>listener</th>
<th>Conn. In</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>mail.remotedomain01.com</td>
<td>172.16.0.2</td>
<td>Incoming01</td>
<td>10</td>
</tr>
<tr>
<td>2</td>
<td>mail.remotedomain01.com</td>
<td>172.16.0.2</td>
<td>Incoming02</td>
<td>10</td>
</tr>
<tr>
<td>3</td>
<td>mail.remotedomain03.com</td>
<td>172.16.0.4</td>
<td>Incoming01</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>mail.remotedomain04.com</td>
<td>172.16.0.5</td>
<td>Incoming02</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>mail.remotedomain05.com</td>
<td>172.16.0.6</td>
<td>Incoming01</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>mail.remotedomain06.com</td>
<td>172.16.0.7</td>
<td>Incoming02</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>mail.remotedomain07.com</td>
<td>172.16.0.8</td>
<td>Incoming01</td>
<td>3</td>
</tr>
<tr>
<td>8</td>
<td>mail.remotedomain08.com</td>
<td>172.16.0.9</td>
<td>Incoming01</td>
<td>3</td>
</tr>
<tr>
<td>9</td>
<td>mail.remotedomain09.com</td>
<td>172.16.0.10</td>
<td>Incoming01</td>
<td>3</td>
</tr>
<tr>
<td>10</td>
<td>mail.remotedomain10.com</td>
<td>172.16.0.11</td>
<td>Incoming01</td>
<td>2</td>
</tr>
<tr>
<td>11</td>
<td>mail.remotedomain11.com</td>
<td>172.16.0.12</td>
<td>Incoming01</td>
<td>2</td>
</tr>
<tr>
<td>12</td>
<td>mail.remotedomain12.com</td>
<td>172.16.0.13</td>
<td>Incoming02</td>
<td>2</td>
</tr>
<tr>
<td>13</td>
<td>mail.remotedomain13.com</td>
<td>172.16.0.14</td>
<td>Incoming01</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>mail.remotedomain14.com</td>
<td>172.16.0.15</td>
<td>Incoming01</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>mail.remotedomain15.com</td>
<td>172.16.0.16</td>
<td>Incoming01</td>
<td>2</td>
</tr>
<tr>
<td>16</td>
<td>mail.remotedomain16.com</td>
<td>172.16.0.17</td>
<td>Incoming01</td>
<td>2</td>
</tr>
<tr>
<td>17</td>
<td>mail.remotedomain17.com</td>
<td>172.16.0.18</td>
<td>Incoming01</td>
<td>1</td>
</tr>
<tr>
<td>18</td>
<td>mail.remotedomain18.com</td>
<td>172.16.0.19</td>
<td>Incoming02</td>
<td>1</td>
</tr>
<tr>
<td>19</td>
<td>mail.remotedomain19.com</td>
<td>172.16.0.20</td>
<td>Incoming01</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>mail.remotedomain20.com</td>
<td>172.16.0.21</td>
<td>Incoming01</td>
<td>1</td>
</tr>
</tbody>
</table>
```

### unsubscribe

**Description**

Update the global unsubscribe list

**Usage**

**Commit:** This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format.

Example

In this example, the address user@example.net is added to the Global Unsubscribe list, and the feature is configured to hard bounce messages. Messages sent to this address will be bounced; the appliance will bounce the message immediately prior to delivery.

```
mail3.example.com> unsubscribe
Global Unsubscribe is enabled. Action: drop.
Choose the operation you want to perform:
- NEW - Create a new entry.
- IMPORT - Import entries from a file.
- SETUP - Configure general settings.
[>] new
Enter the unsubscribe key to add. Partial addresses such as "@example.com" or "user@" are allowed, as are IP addresses. Partial hostnames such as "@.example.com" are allowed.
[>] user@example.net
Email Address 'user@example.net' added.
Global Unsubscribe is enabled. Action: drop.
Choose the operation you want to perform:
- NEW - Create a new entry.
- DELETE - Remove an entry.
- PRINT - Display all entries.
- IMPORT - Import entries from a file.
- EXPORT - Export all entries to a file.
- SETUP - Configure general settings.
- CLEAR - Remove all entries.
[>] setup
Do you want to enable the Global Unsubscribe feature? [Y]> y
Would you like matching messages to be dropped or bounced?
1. Drop
2. Bounce
[1]> 2
Global Unsubscribe is enabled. Action: bounce.
Choose the operation you want to perform:
- NEW - Create a new entry.
- DELETE - Remove an entry.
- PRINT - Display all entries.
- IMPORT - Import entries from a file.
- EXPORT - Export all entries to a file.
- SETUP - Configure general settings.
- CLEAR - Remove all entries.
[]
mail3.example.com> commit
Please enter some comments describing your changes:
[>] Added username "user@example.net" to global unsubscribe
```
workqueue

Description

Display and/or alter work queue pause status

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> workqueue
Status: Operational
Messages: 1243

Manually pause work queue? This will only affect unprocessed messages. [N]> y

Reason for pausing work queue:
[]> checking LDAP server

Status: Paused by admin: checking LDAP server
Messages: 1243

```

Note

Entering a reason is optional. If you do not enter a reason, the system logs the reason as “operator paused.”

```
In this example, the work queue is resumed:

mail3.example.com> workqueue
Status: Paused by admin: checking LDAP server
Messages: 1243

Resume the work queue? [Y]> y

Status: Operational
Messages: 1243
```

Networking Configuration / Network Tools

This section contains the following CLI commands:

- etherconfig
- interfaceconfig
etherconfig

Description

Configure Ethernet settings, including media settings, NIC pairing, VLAN configuration, and DSR configuration.

Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command is restricted to machine mode.

Batch Command: This command does not support a batch format.

Example

mail3.example.com> etherconfig

Choose the operation you want to perform:
- MEDIA - View and edit ethernet media settings.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.
- MTU - View and configure MTU.
- MULTICAST - Accept or reject ARP replies with a multicast address.
[1]> vlan

VLAN interfaces:

Choose the operation you want to perform:
- NEW - Create a new VLAN.
[1]> new
VLAN tag ID for the interface (Ex: "34"): [1] > 12

Enter the name or number of the ethernet interface you wish bind to:
1. Data 1
2. Data 2
3. Management
[1] > 1

VLAN interfaces:
1. VLAN 12 (Data 1)

Choose the operation you want to perform:
- NEW - Create a new VLAN.
- EDIT - Edit a VLAN.
- DELETE - Delete a VLAN.

Choose the operation you want to perform:
- MEDIA - View and edit ethernet media settings.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.
- MTU - View and configure MTU.
- MULTICAST - Accept or reject ARP replies with a multicast address.

Choose the operation you want to perform:
- ENABLE - Enable Loopback Interface.

Choose the operation you want to perform:
- MEDIA - View and edit ethernet media settings.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.
- MTU - View and configure MTU.
- MULTICAST - Accept or reject ARP replies with a multicast address.

Choose the operation you want to perform:
- EDIT - Edit an ethernet interface.

Enter the name or number of the ethernet interface you wish to edit.
[1] > pair1

That value is not valid.

Enter the name or number of the ethernet interface you wish to edit.
[1] > 12

That value is not valid.

Enter the name or number of the ethernet interface you wish to edit.
[1] > 2
Please enter a non-default (1500) MTU value for the Data 2 interface.

}> 1200

Ethernet interfaces:
1. Data 1 default mtu 1500
2. Data 2 mtu 1200
3. Management default mtu 1500
4. VLAN 12 default mtu 1500

Choose the operation you want to perform:
- EDIT - Edit an ethernet interface.

interfaceconfig

Description
Configure the interface. You can create, edit, or delete interfaces. You can enable FTP, change an IP address, and configure Ethernet IP addresses.

Usage
Commit: This command requires a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command supports a batch format.

Batch Format
The batch format of the interfaceconfig command can be used to perform all the functions of the traditional CLI command.
- Creating a new interface

interfaceconfig new <name>

<ethernet interface>

<hostname>

--ip=IPv4 Address/Netmask

--ip6=IPv6 Address/Prefix Length

[-ftp[=<port>]]

[-telnet[=<port>]]

[-ssh[=<port>]]

[-http[=<port>]]

[-https[=<port>]]
Deleting an interface

interfaceconfig delete <name>

Example: Configuring an Interface

mail.example.com> interfaceconfig

Currently configured interfaces:
1. Management (10.76.69.149/24 on Management: mail.example.com)

Choose the operation you want to perform:
- NEW - Create a new interface.
- EDIT - Modify an interface.
- GROUPS - Define interface groups.
- DELETE - Remove an interface.
[]> edit

Enter the number of the interface you wish to edit.
[]> 1

IP interface name (Ex: "InternalNet"):
[Management]> 

Would you like to configure an IPv4 address for this interface (y/n)? [Y]> 

IPv4 Address (Ex: 192.168.1.2):
[1.1.1.1]> 

Netmask (Ex: "24", "255.255.255.0" or "0xffffffff"):
[0xffffffff]> 

Would you like to configure an IPv6 address for this interface (y/n)? [N]> n

Ethernet interface:
1. Data 1
2. Data 2
3. Management
[]> 3

Hostname:
[mail.example.com]> 

Do you want to enable SSH on this interface? [Y]> 

Which port do you want to use for SSH?
[22]> 

Do you want to enable FTP on this interface? [N]> 

Do you want to enable Cluster Communication Service on this interface? [N]>
Do you want to enable HTTP on this interface? [Y]>
Which port do you want to use for HTTP? [80]>
Do you want to enable HTTPS on this interface? [Y]>
Which port do you want to use for HTTPS? [443]>
Do you want to enable Spam Quarantine HTTP on this interface? [N]>
Do you want to enable Spam Quarantine HTTPS on this interface? [N] y
Do you want to enable AsyncOS API (Monitoring) HTTP on this interface? [N]> y
Which port do you want to use for AsyncOS API (Monitoring) HTTP? [6080]>
Do you want to enable AsyncOS API (Monitoring) HTTPS on this interface? [N]> y
Which port do you want to use for AsyncOS API (Monitoring) HTTPS? [6443]>
The "Demo" certificate is currently configured. You may use "Demo", but this will not be secure. To assure privacy, run "certconfig" first.
Both HTTP and HTTPS are enabled for this interface, should HTTP requests redirect to the secure service? [Y]>
You have edited the interface you are currently logged into. Are you sure you want to change it? [Y]>

Currently configured interfaces:
1. Management (10.76.69.149/24 on Management: mail.example.com)

Choose the operation you want to perform:
- NEW - Create a new interface.
- EDIT - Modify an interface.
- GROUPS - Define interface groups.
- DELETE - Remove an interface.

nslookup

Description

Use the nslookup command to check the DNS functionality.
The nslookup command can confirm that the appliance is able to reach and resolve hostnames and IP addresses from a working DNS (domain name service) server.

Table 3-9 nslookup Command Query Types

<table>
<thead>
<tr>
<th>Query Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>the host’s Internet address</td>
</tr>
<tr>
<td>CNAME</td>
<td>the canonical name for an alias</td>
</tr>
</tbody>
</table>
Table 3-9 **nslookup Command Query Types**

<table>
<thead>
<tr>
<th>Query Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MX</td>
<td>the mail exchanger</td>
</tr>
<tr>
<td>NS</td>
<td>the name server for the named zone</td>
</tr>
<tr>
<td>PTR</td>
<td>the hostname if the query is an Internet address, otherwise the pointer to other information</td>
</tr>
<tr>
<td>SOA</td>
<td>the domain’s “start-of-authority” information</td>
</tr>
<tr>
<td>TXT</td>
<td>the text information</td>
</tr>
</tbody>
</table>

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format

**Example**

```
mail.example.com> nslookup

Please enter the host or IP address to resolve.
[1]> vm30esa0086.ibqa

Choose the query type:
1. A       the host’s IP address
2. AAAA    the host’s IPv6 address
3. CNAME   the canonical name for an alias
4. MX      the mail exchanger
5. NS      the name server for the named zone
6. PTR     the hostname if the query is an Internet address,
            otherwise the pointer to other information
7. SOA     the domain’s "start-of-authority" information
8. TXT     the text information
[1]> 2

AAAA=2001:420:54ff:ff06::95 TTL=30m
```

**netstat**

**Description**

Use the `netstat` command to displays network connections (both incoming and outgoing), routing tables, and a number of network interface statistics. Note that this version will not support all arguments. Specifically, you cannot use `-a`, `-A`, `-g`, `-m`, `-M`, `-N`, `-s`. The command was designed to be run in interactive mode, so that you may enter `netstat`, then choose from five options to report on. You can also specify the interface to listen on and the interval for display.
Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode.

Batch Command: This command does not support a batch format

Example

```
example.com> netstat
Choose the information you want to display:
1. List of active sockets.
2. State of network interfaces.
3. Contents of routing tables.
4. Size of the listen queues.
5. Packet traffic information.
[1]> 2
Select the ethernet interface whose state you wish to display:
1. Data 1
2. Data 2
3. Management
4. ALL
[1]> 1
Show the number of bytes in and out? [N]> y
Show the number of dropped packets? [N]> y
Name    Mtu Network       Address              Ipkts Ierrs    Opkts Oerrs Coll Drop
Data 1 1500 197.19.1/24   example.com       30536     -        5     -    -    -
```

packetcapture

Description

Use the netstat command to displays network connections (both incoming and outgoing), routing tables, and a number of network interface statistics. Note that this version will not support all arguments. Specifically, you cannot use -a, -A, -g, -m, -M, -N, -s. The command was designed to be run in interactive mode, so that you may enter netstat, then choose from five options to report on. You can also specify the interface to listen on and the interval for display.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format

Example

```
mail.example.com> packetcapture
Capture Information:
Status: No capture running
```
Current Settings:
- Maximum File Size: 200 MB
- Limit: None (Run Indefinitely)
- Interface(s): ALL
- Filter: (tcp port 25)

Choose the operation you want to perform:
- START - Start packet capture.
- SETUP - Change packet capture settings.

[]> start
Success - Packet Capture has started

Capture Information:
- File Name: C100V-421C73B18CFB0578A83-B03A99E71ED8-20150312-105256.cap
- File Size: 0 of 200M
- Duration: 0s
- Limit: None (Run Indefinitely)
- Interface(s): ALL
- Filter: (tcp port 25)

Choose the operation you want to perform:
- STOP - Stop packet capture.
- STATUS - Display current capture status.
- SETUP - Change packet capture settings.

[]> stop
Success - Packet Capture has stopped

Capture Information:
- File Name: C100V-421C73B18CFB0578A83-B03A99E71ED8-20150312-105256.cap
- File Size: 24 of 200M
- Duration: 10s
- Limit: None (Run Indefinitely)
- Interface(s): ALL
- Filter: (tcp port 25)

Choose the operation you want to perform:
- START - Start packet capture.
- SETUP - Change packet capture settings.

[]> setup

Enter maximum allowable size for the capture file (in MB)
[200]>

Do you want to stop the capture when the file size is reached? (If not, a new file will be started and the older capture data will be discarded.)
[N]>

The following interfaces are configured:
1. Management
2. ALL

Enter the name or number of one or more interfaces to capture packets from, separated by commas (enter ALL to use all interfaces):
[2]>

Select an operation. Press enter to continue with the existing filter.
- PREDEFINED - PREDEFINED filter.
- CUSTOM - CUSTOM filter.
- CLEAR - CLEAR filter.
[]>

Capture settings successfully saved.
Current Settings:
- Maximum File Size: 200 MB
- Limit: None (Run Indefinitely)
- Interface(s): ALL
- Filter: (tcp port 25)

Choose the operation you want to perform:
- START - Start packet capture.
- SETUP - Change packet capture settings.

ping

Description

The ping command allows you to test connectivity to a network host from the appliance.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.

Batch Command: This command does not support a batch format.

Example

mail3.example.com> ping

Which interface do you want to send the pings from?
1. Auto
2. Management (192.168.42.42/24: mail3.example.com)
3. PrivateNet (192.168.1.1/24: mail3.example.com)
4. PublicNet (192.168.2.1/24: mail3.example.com)
[1]> 1

Please enter the host you wish to ping.
[1]> anotherhost.example.com

Press Ctrl-C to stop.
PING anotherhost.example.com (x.x.x.x): 56 data bytes
64 bytes from 10.19.0.31: icmp_seq=0 ttl=64 time=1.421 ms
64 bytes from 10.19.0.31: icmp_seq=1 ttl=64 time=0.126 ms
64 bytes from 10.19.0.31: icmp_seq=2 ttl=64 time=0.118 ms
64 bytes from 10.19.0.31: icmp_seq=3 ttl=64 time=0.115 ms
64 bytes from 10.19.0.31: icmp_seq=4 ttl=64 time=0.139 ms
64 bytes from 10.19.0.31: icmp_seq=5 ttl=64 time=0.125 ms
64 bytes from 10.19.0.31: icmp_seq=6 ttl=64 time=0.124 ms
64 bytes from 10.19.0.31: icmp_seq=7 ttl=64 time=0.122 ms
64 bytes from 10.19.0.31: icmp_seq=8 ttl=64 time=0.126 ms
64 bytes from 10.19.0.31: icmp_seq=9 ttl=64 time=0.133 ms
64 bytes from 10.19.0.31: icmp_seq=10 ttl=64 time=0.115 ms
^C
--- anotherhost.example.com ping statistics ---
11 packets transmitted, 11 packets received, 0% packet loss
round-trip min/avg/max/stddev = 0.115/0.242/1.421/0.373 ms
^C

Note
You must use Control-C to end the ping command.

### ping6

**Description**

Ping a network host using IPv6

**Usage**

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.

**Batch Command:** This command does not support a batch format.

**Example**

```bash
mail.example.com> ping6
Which interface do you want to send the pings from?
1. Auto
2. Management (192.168.42.42/24: mail3.example.com)
[1]> 1
Please enter the host you wish to ping.
[1]> anotherhost.example.com
Press Ctrl-C to stop.
```

Note
You must use Control-C to end the ping6 command.

### routeconfig

**Description**

The `routeconfig` command allows you to create, edit, and delete static routes for TCP/IP traffic. By default, traffic is routed through the default gateway set with the `setgateway` command. However, AsyncOS allows specific routing based on destination.
Routes consist of a nickname (for future reference), a destination, and a gateway. A gateway (the next hop) is an IP address such as 10.1.1.2. The destination can be one of two things:

- an IP address, such as 192.168.14.32
- a subnet using CIDR notation. For example, 192.168.5.0/24 means the entire class C network from 192.168.5.0 to 192.168.5.255.

For IPv6 addresses, you can use the following formats:

- 2620:101:2004:4202::
- 2620:101:2004:4202::23
- 2620:101:2004:4202::/64

The command presents a list of all currently configured TCP/IP routes for you to select from using the edit and delete subcommands.

**Usage**

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command supports a batch format.

**Batch Format**

The batch format of the `smtp routes` command can be used to perform all the functions of the traditional CLI command. You can choose whether to use IPv4 or IPv6 addresses for the route.

- Creating a static route:

  \[
  \text{routeconfig new 4|6 <name> <destination_address> <gateway_ip>}
  \]

<table>
<thead>
<tr>
<th>Table 3-10 routeconfig Arguments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argument</td>
</tr>
<tr>
<td>4</td>
</tr>
<tr>
<td>name</td>
</tr>
<tr>
<td>destination_address</td>
</tr>
<tr>
<td>gateway_ip</td>
</tr>
</tbody>
</table>

- Editing a static route:

  \[
  \text{routeconfig edit 4|6 <name> <new_name> <destination_address> <gateway_ip>}
  \]
• Deleting a static route:
  
  routeconfig delete 4|6 <name>

• Deleting all static routes:
  
  routeconfig clear [4|6]

• Printing a list of static routes:
  
  routeconfig print [4|6]

Example

mail3.example.com> routeconfig

Configure routes for:

1. IPv4
2. IPv6
[1]>

Currently configured routes:

Choose the operation you want to perform:
- NEW - Create a new route.
[ ]> new

Please create a name for the route:
[ ]> EuropeNet

Please enter the destination IPv4 address to match on. CIDR addresses such as 192.168.42.0/24 are also allowed.
[ ]> 192.168.12.0/24

Please enter the gateway IP address for traffic to 192.168.12.0/24:
[ ]> 192.168.14.4

Currently configured routes:

Choose the operation you want to perform:
- NEW - Create a new route.
- EDIT - Modify a route.
- DELETE - Remove a route.
- CLEAR - Clear all entries.

[ ]>

mail3.example.com> routeconfig

Configure routes for:

1. IPv4
2. IPv6
Currently configured routes:

Choose the operation you want to perform:
- NEW - Create a new route.
[1]> new

Please create a name for the route:
[1]> EuropeIPv6Net

Please enter the destination IPv6 address to match on. CIDR addresses such as 2001:db8::/32 are also allowed.

Please enter the gateway IP address for traffic to 2620:101:2004:4202::/6:

Currently configured routes:

Choose the operation you want to perform:
- NEW - Create a new route.
- EDIT - Modify a route.
- DELETE - Remove a route.
- CLEAR - Clear all entries.
[1]>

**setgateway**

**Description**

The `setgateway` command configures the default next-hop intermediary through which packets should be routed. Alternate (non-default) gateways are configured using the `routeconfig` command.

**Usage**

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

**Example**

```
mail3.example.com> setgateway

Warning: setting an incorrect default gateway may cause the current connection to be interrupted when the changes are committed.
Enter new default gateway:
[10.1.1.1]> 192.168.20.1

mail3.example.com> commit
```
Please enter some comments describing your changes:

[]> changed default gateway to 192.168.20.1

Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT

sethostname

Description

The hostname is used to identify the system at the CLI prompt. You must enter a fully-qualified hostname. The `sethostname` command sets the name of the Email Security appliance. The new hostname does not take effect until you issue the `commit` command.

Usage

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

Example

```
oldname.example.com> sethostname
[oldname.example.com]> mail3.example.com
oldname.example.com>
```

For the hostname change to take effect, you must enter the `commit` command. After you have successfully committed the hostname change, the new name appears in the CLI prompt:

```
oldname.example.com> commit
Please enter some comments describing your changes:
[]> Changed System Hostname
Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT
```

The new hostname appears in the prompt as follows:

```
mail3.example.com>
```

smtproutes

Description

Set up permanent domain redirections.
# Usage

**Commit**: This command requires a ‘commit’.

**Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).

**Batch Command**: This command supports a batch format.

## Batch Format

The batch format of the `smtproutes` command can be used to perform all the functions of the traditional CLI command.

- Creating a new SMTP route
  
  ```sh
  smtproutes new <source> <destination> [destination] [destination] [...]
  ```

- Deleting an existing SMTP route
  
  ```sh
  smtproutes delete <source>
  ```

- Clear a listing of SMTP routes
  
  ```sh
  smtproutes clear
  ```

- Print a listing of SMTP routes
  
  ```sh
  smtproutes print
  ```

- Import a listing of SMTP routes
  
  ```sh
  smtproutes import <filenames>
  ```

- Export a listing of SMTP routes
  
  ```sh
  smtproutes export <filenames>
  ```

## Example

In the following example, the `smtproutes` command is used to construct a route (mapping) for the domain `example.com` to `relay1.example.com`, `relay2.example.com`, and `backup-relay.example.com`. Use `/pri=#` to specify a destination priority. THE # should be from 0-65535, with larger numbers indicating decreasing priority. If unspecified, the priority defaults to 0.

(Nota that you may have constructed the same mapping during the `systemsetup` command when you configured the InboundMail public listener.)

```sh
mail3.example.com> smtproutes

There are no routes configured.

Choose the operation you want to perform:
```
- NEW - Create a new route.
- IMPORT - Import new routes from a file.

\[
\text{new}
\]

Enter the domain for which you want to set up a permanent route. Partial hostnames such as ".example.com" are allowed. Use "ALL" for the default route.

\[
\text{example.com}
\]

Enter the destination hosts, separated by commas, which you want mail for example.com to be delivered. Enter USEDNS by itself to use normal DNS resolution for this route. Enter /dev/null by itself if you wish to discard the mail. Enclose in square brackets to force resolution via address (A) records, ignoring any MX records.

\[
\text{relay1.example.com/pri=10, relay2.example.com, backup-relay.example.com}
\]

Mapping for example.com to relay1.example.com, relay2.example.com, backup-relay.example.com/pri=10 created.

There are currently 1 routes configured.

Choose the operation you want to perform:
- NEW - Create a new route.
- EDIT - Edit destinations of an existing route.
- DELETE - Remove a route.
- PRINT - Display all routes.
- IMPORT - Import new routes from a file.
- EXPORT - Export all routes to a file.
- CLEAR - Remove all routes.

\[
\text{sslconfig}
\]

**Description**

Configure SSL settings for the appliance.

Keep in mind that,
- In non-FIPS mode, you cannot enable SSL v2 and TLS v1 methods simultaneously. However, you can enable these methods in conjunction with SSL v3 method.
- If FIPS mode, you cannot use the SSL methods (SSL v2 and SSL v3).
- In FIPS and non-FIPS mode, you cannot enable TLS v1.0 and v1.1 methods simultaneously. However, you can enable these methods in conjunction with TLS v1.2 method.

**Usage**

**Commit**: This command requires a ‘commit’.

**Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).

**Batch Command**: This command does not support a batch format.
Example

mail.example.com> sslconfig

sslconfig settings:
  GUI HTTPS method: tlsv1_tlsv1_2
  GUI HTTPS ciphers:
    RC4-SHA
    RC4-MD5
    ALL
    -aNULL
    -EXPORT
  Inbound SMTP method: tlsv1_tlsv1_2
  Inbound SMTP ciphers:
    RC4-SHA
    RC4-MD5
    ALL
    -aNULL
    -EXPORT
  Outbound SMTP method: tlsv1_tlsv1_2
  Outbound SMTP ciphers:
    RC4-SHA
    ALL
    -aNULL
    -EXPORT

Choose the operation you want to perform:
  - GUI - Edit GUI HTTPS ssl settings.
  - INBOUND - Edit Inbound SMTP ssl settings.
  - OUTBOUND - Edit Outbound SMTP ssl settings.
  - VERIFY - Verify and show ssl cipher list.

[>] gui

Enter the GUI HTTPS ssl method you want to use.
  1. TLS v1.0
  2. TLS v1.1
  3. TLS v1.2
  4. SSL v2
  5. SSL v3
[2, 3]> 

Enter the GUI HTTPS ssl cipher you want to use.
[RC4-SHA:RC4-MD5:ALL:-aNULL:-EXPORT]>

sslconfig settings:
  GUI HTTPS method: tlsv1_tlsv1_2
  GUI HTTPS ciphers:
    RC4-SHA
    RC4-MD5
    ALL
    -aNULL
    -EXPORT
  Inbound SMTP method: tlsv1_tlsv1_2
  Inbound SMTP ciphers:
    RC4-SHA
    RC4-MD5
    ALL
    -aNULL
    -EXPORT
  Outbound SMTP method: tlsv1_tlsv1_2
  Outbound SMTP ciphers:
    RC4-SHA
Choose the operation you want to perform:
- GUI - Edit GUI HTTPS ssl settings.
- INBOUND - Edit Inbound SMTP ssl settings.
- OUTBOUND - Edit Outbound SMTP ssl settings.
- VERIFY - Verify and show ssl cipher list.

\[/>\] inbound

Enter the inbound SMTP ssl method you want to use.
1. TLS v1.0
2. TLS v1.1
3. TLS v1.2
4. SSL v2
5. SSL v3

\[2, 3\]>

Enter the inbound SMTP ssl cipher you want to use.

\[RC4-SHA;RC4-MD5;ALL;\-aNULL;\-EXPORT\]>

sslconfig settings:
- GUI HTTPS method: tls1_1tls1_2
- GUI HTTPS ciphers:
  - RC4-SHA
  - RC4-MD5
  - ALL
  - aNULL
  - EXPORT
- Inbound SMTP method: tls1_1tls1_2
- Inbound SMTP ciphers:
  - RC4-SHA
  - RC4-MD5
  - ALL
  - aNULL
  - EXPORT
- Outbound SMTP method: tls1_1tls1_2
- Outbound SMTP ciphers:
  - RC4-SHA
  - RC4-MD5
  - ALL
  - aNULL
  - EXPORT

Choose the operation you want to perform:
- GUI - Edit GUI HTTPS ssl settings.
- INBOUND - Edit Inbound SMTP ssl settings.
- OUTBOUND - Edit Outbound SMTP ssl settings.
- VERIFY - Verify and show ssl cipher list.

\[/\]>

sslv3config

Description

Enable or disable SSLv3 settings for the appliance.
Usage

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

Example

The following example shows how to disable SSLv3 for End User Quarantine.

```plaintext
mail.example.com> sslv3config

Current SSLv3 Settings:
--------------------------------------------------
  UPDATER     :   Enabled
  WEBSECURITY :   Enabled
  EUQ         :   Enabled
  LDAP        :   Enabled
--------------------------------------------------

Choose the operation you want to perform:
- SETUP - Toggle SSLv3 settings.

[1]> setup

Choose the service to toggle SSLv3 settings:
1. EUQ Service
2. LDAP Service
3. Updater Service
4. Web Security Service

[1]>

Do you want to enable SSLv3 for EUQ Service? [y]>n

Choose the operation you want to perform:
- SETUP - Toggle SSLv3 settings.

[1]>

telnet

Description

Connect to a remote host

Usage

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.

**Batch Command:** This command does not support a batch format.
Example

mail3.example.com> telnet

Please select which interface you want to telnet from.
1. Auto
2. Management (192.168.42.42/24: mail3.example.com)
3. PrivateNet (192.168.1.1/24: mail3.example.com)
4. PublicNet (192.168.2.1/24: mail3.example.com)
[1]> 3
Enter the remote hostname or IP.
[1]> 193.168.1.1
Enter the remote port.
[25]> 25
Trying 193.168.1.1...
Connected to 193.168.1.1.
Escape character is '^]'.

traceroute

Description

Use the traceroute command to test connectivity to a network host using IPV4 from the appliance and debug routing issues with network hops.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.
Batch Command: This command does not support a batch format.

Example

mail3.example.com> traceroute

Which interface do you want to trace from?
1. Auto
2. Management (192.168.42.42/24: mail3.example.com)
3. PrivateNet (192.168.1.1/24: mail3.example.com)
4. PublicNet (192.168.2.1/24: mail3.example.com)
[1]> 1
Please enter the host to which you want to trace the route.
[1]> 10.1.1.1
Press Ctrl-C to stop.
traceroute to 10.1.1.1 (10.1.1.1), 64 hops max, 44 byte packets
  1 gateway (192.168.0.1)  0.202 ms  0.173 ms  0.161 ms
  2 hostname (10.1.1.1)  0.298 ms  0.302 ms  0.291 ms
mail3.example.com>
traceroute6

Description

Use the traceroute6 command to test connectivity to a network host using IPV6 from the appliance and debug routing issues with network hops.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.

Batch Command: This command does not support a batch format.

Example

mail.example.com> traceroute6

Which interface do you want to trace from?
1. Auto
2. D1 (2001:db8::/32: example.com)
[1]> 1

Please enter the host to which you want to trace the route.
[1]> example.com

Press Ctrl-C to stop.
connect: No route to host
vm10esa0031.qa> traceroute6

Which interface do you want to trace from?
1. Auto
2. D1 (2001:db8::/32: example.com)
[1]> 2

Please enter the host to which you want to trace the route.
[1]> example.com

Press Ctrl-C to stop.
traceroute6 to example.com (2606:2800:220:1:248:1893:25c8:1946) from 2001:db8::, 64 hops max, 12 byte packets
sendto: No route to host
1 traceroute6: wrote example.com 12 chars, ret=-1
*sendto: No route to host
traceroute6: wrote example.com 12 chars, ret=-1
*sendto: No route to host
traceroute6: wrote example.com 12 chars, ret=-1
Outbreak Filters

This section contains the following CLI commands:

- `outbreakconfig`
- `outbreakflush`
- `outbreakstatus`
- `outbreakupdate`

**outbreakconfig**

**Description**

Use the `outbreakconfig` command to configure the Outbreak Filter feature. You perform the following actions using this command:

- Enable Outbreak Filters globally
- Enable Adaptive Rules scanning
- Set a maximum size for files to scan (note that you are entering the size in bytes)
- Enable alerts for the Outbreak Filter
- Enable Logging of URLs

**Usage**

- **Commit**: This command requires a ‘commit’.
- **Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).
- **Batch Command**: This command does not support a batch format.

**Example**

```bash
mail.example.com> outbreakconfig
Outbreak Filters: Enabled
Choose the operation you want to perform:
- SETUP - Change Outbreak Filters settings.

{}> setup
Outbreak Filters: Enabled
Would you like to use Outbreak Filters? [Y]> 
Outbreak Filters enabled.

Outbreak Filter alerts are sent when outbreak rules cross the threshold (go above or back down below), meaning that new messages of certain types could be quarantined or will no longer be quarantined, respectively.

Would you like to receive Outbreak Filter alerts? [N]> 

What is the largest size message Outbreak Filters should scan?
```
Do you want to use adaptive rules to compute the threat level of messages? [Y]> Y

Logging of URLs is currently disabled.

Do you wish to enable logging of URL's? [N]> Y

Logging of URLs has been enabled.

The Outbreak Filters feature is now globally enabled on the system. You must use the 'policyconfig' command in the CLI or the Email Security Manager in the GUI to enable Outbreak Filters for the desired Incoming and Outgoing Mail Policies.

Choose the operation you want to perform:
- SETUP - Change Outbreak Filters settings.

outbreakflush

Description

Clear the cached Outbreak Rules.

Usage

Commit: This command does not require a 'commit'.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail3.example.com> outbreakflush

Warning - This command removes the current set of Outbreak Filter Rules, leaving your network exposed until the next rule download. Run "outbreakupdate force" command to immediately download Outbreak Filter Rules.

Are you sure that you want to clear the current rules? [N]> y

Cleared the current rules.

mail3.example.com>
outbreakstatus

Description

The `outbreakstatus` command shows the current Outbreak Filters feature settings, including whether the Outbreak Filters feature is enabled, any Outbreak Rules, and the current threshold.

Usage

**Commit**: This command does not require a ‘commit’.

**Cluster Management**: This command is restricted to machine mode.

**Batch Command**: This command does not support a batch format.

Example

```
mail3.example.com> outbreakstatus
Outbreak Filters: Enabled

Component Last Update Version
CASE Core Files 26 Jan 2014 06:45 (GMT +00:00) 3.3.1-005
CASE Utilities 26 Jan 2014 06:45 (GMT +00:00) 3.3.1-005
Outbreak Rules 26 Jan 2014 07:00 (GMT +00:00) 20140126_063240

Threat Outbreak Level Rule Name Rule Description
---------------------------------------------------------------------
5 OUTBREAK_0002187_03 5 A reported a MyDoom.BB outbreak.
5 OUTBREAK_0005678_00 5 This configuration file was generated by...
3 OUTBREAK_0000578_00 3 This virus is distributed in pictures of...

Outbreak Filter Rules with higher threat levels pose greater risks. (5 = highest threat, 1 = lowest threat)

Last update: Mon Jan 27 04:36:27 2014
```

outbreakupdate

Description

Requests an immediate update of CASE rules and engine core.

Usage

**Commit**: This command does not require a ‘commit’.

**Cluster Management**: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto).
**Batch Command:** This command does not support a batch format.

**Example**

```
elroy.run> outbreakupdate
Requesting updates for Outbreak Filter Rules.
```

**Policy Enforcement**

This section contains the following CLI commands:

- `dictionaryconfig`
- `exceptionconfig`
- `filters`
- `policyconfig`
- `quarantineconfig`
- `scanconfig`
- `stripheaders`
- `textconfig`

**dictionaryconfig**

**Description**

Configure content dictionaries

**Usage**

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

**Example**

Use `dictionaryconfig -> new` to create dictionaries, and `dictionaryconfig -> delete` to remove dictionaries.

**Creating a Dictionary**

```
example.com> dictionaryconfig

No content dictionaries have been defined.
```
Choose the operation you want to perform:
- NEW - Create a new content dictionary.

[>] new

Enter a name for this content dictionary.
[>] HRWords

Do you wish to specify a file for import? [N]>

Enter new words or regular expressions, enter a blank line to finish.
<list of words typed here>

Currently configured content dictionaries:
1. HRWords

Choose the operation you want to perform:
- NEW - Create a new content dictionary.
- EDIT - Modify a content dictionary.
- DELETE - Remove a content dictionary.
- RENAME - Change the name of a content dictionary.

[>] delete

Enter the number of the dictionary you want to delete:
1. HRWords

[>] 1

Content dictionary "HRWords" deleted.
No content dictionaries have been defined.

Choose the operation you want to perform:
- NEW - Create a new content dictionary.

[>

Creating a Dictionary 2

In this example, a new dictionary named “secret_words” is created to contain the term “codename.” Once the dictionary has been entered, the edit -> settings subcommand is used to define the case-sensitivity and word boundary detection for words in the dictionary.

mail3.example.com> dictionaryconfig

No content dictionaries have been defined.

Choose the operation you want to perform:
- NEW - Create a new content dictionary.

[>] new

Enter a name for this content dictionary.
[>] secret_words

Do you wish to specify a file for import? [N]>

Enter new words or regular expressions, enter a blank line to finish.
codename

Currently configured content dictionaries:
1. secret_words

Choose the operation you want to perform:
- NEW - Create a new content dictionary.
- EDIT - Modify a content dictionary.
- DELETE - Remove a content dictionary.
- RENAME - Change the name of a content dictionary.
Chapter 3      The Commands: Reference Examples

Policy Enforcement

[]> edit
Enter the number of the dictionary you want to edit:
1. secret_words
[]> 1

Choose the operation you want to perform on dictionary 'secret_words':
- NEW - Create new entries in this dictionary.
- IMPORT - Replace all of the words in this dictionary.
- EXPORT - Export the words in this dictionary.
- DELETE - Remove an entry in this dictionary.
- PRINT - List the entries in this dictionary.
- SETTINGS - Change settings for this dictionary.
[]> settings

Do you want to ignore case when matching using this dictionary? [Y]> 

Do you want strings in this dictionary to only match complete words? [Y]>

Enter the default encoding to be used for exporting this dictionary:
1. US-ASCII
2. Unicode (UTF-8)
3. Unicode (UTF-16)
4. Western European/Latin-1 (ISO 8859-1)
5. Western European/Latin-1 (Windows CP1252)
6. Traditional Chinese (Big 5)
7. Simplified Chinese (GB 2312)
8. Simplified Chinese (HZ GB 2312)
11. Japanese (Shift-JIS (X0123))
13. Japanese (EUC)
[]> 2

Choose the operation you want to perform on dictionary 'secret_words':
- NEW - Create new entries in this dictionary.
- IMPORT - Replace all of the words in this dictionary.
- EXPORT - Export the words in this dictionary.
- DELETE - Remove an entry in this dictionary.
- PRINT - List the entries in this dictionary.
- SETTINGS - Change settings for this dictionary.
[]>

Currently configured content dictionaries:
1. secret_words

Choose the operation you want to perform:
- NEW - Create a new content dictionary.
- EDIT - Modify a content dictionary.
- DELETE - Remove a content dictionary.
- RENAME - Change the name of a content dictionary.
[]>

mail3.example.com> commit

Please enter some comments describing your changes:
[]> Added new dictionary: secret_words

Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT
Importing Dictionaries

In the example below, using the `dictionaryconfig` command, 84 terms in the `profanity.txt` text file are imported as Unicode (UTF-8) into a dictionary named `profanity`.

```
mail3.example.com> dictionaryconfig

No content dictionaries have been defined.

Choose the operation you want to perform:

- NEW - Create a new content dictionary.
  []> new

Enter a name for this content dictionary.
  []> profanity

Do you wish to specify a file for import?  [N]> y

Enter the name of the file to import:
  []> profanity.txt

Enter the encoding to use for the imported file:

1. US-ASCII
2. Unicode (UTF-8)
3. Unicode (UTF-16)
4. Western European/Latin-1 (ISO 8859-1)
5. Western European/Latin-1 (Windows CP1252)
6. Traditional Chinese (Big 5)
7. Simplified Chinese (GB 2312)
8. Simplified Chinese (HZ GB 2312)
11. Japanese (Shift-JIS (X0123))
13. Japanese (EUC)

Currently configured content dictionaries:
1. profanity

Choose the operation you want to perform:

- NEW - Create a new content dictionary.
- EDIT - Modify a content dictionary.
- DELETE - Remove a content dictionary.
- RENAME - Change the name of a content dictionary.
```

Exporting Dictionaries

In the example below, using the `dictionaryconfig` command, the `secret_words` dictionary is exported to a text file named `secret_words_export.txt`.

```
mail3.example.com> dictionaryconfig

Currently configured content dictionaries:
1. secret_words

Choose the operation you want to perform:

- NEW - Create a new content dictionary.
- EDIT - Modify a content dictionary.
- DELETE - Remove a content dictionary.
- RENAME - Change the name of a content dictionary.
```
exceptionconfig

Description

Use the `exceptionconfig` command in the CLI to create the domain exception table. In this example, the email address “admin@zzzzaazzz.com” is added to the domain exception table with a policy of “Allow.”

Usage

**Commit:** This command requires a `commit`. 
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format.

Example

```
mail3.example.com> exceptionconfig

Choose the operation you want to perform:
- NEW - Create a new domain exception table entry
[1]> new

Enter a domain, sub-domain, user, or email address for which you wish to provide an exception:
[1]> mail.partner.com

Any of the following passes:
- @[IP address]
  Matches any email address with this IP address.
- @domain
  Matches any email address with this domain.
- @.partial.domain
  Matches any email address domain ending in this domain.
- user@
  Matches any email address beginning with user@.
- user@domain
  Matches entire email address.

Enter a domain, sub-domain, user, or email address for which you wish to provide an exception:
[1]> admin@zzzaaazzz.com

Choose a policy for this domain exception:
1. Allow
2. Reject
[1]> 1

Choose the operation you want to perform:
- NEW - Create a new domain exception table entry
- EDIT - Edit a domain exception table entry
- DELETE - Delete a domain exception table entry
- PRINT - Print all domain exception table entries
- SEARCH - Search domain exception table
- CLEAR - Clear all domain exception entries
[1]>
```

filters

Description

Configure message processing options.

Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format

Example

In this example, the filter command is used to create three new filters:

- The first filter is named big_messages. It uses the body-size rule to drop messages larger than 10 megabytes.
- The second filter is named no_mp3s. It uses the attachment-filename rule to drop messages that contain attachments with the filename extension of .mp3.
- The third filter is named mailfrompm. It uses mail-from rule examines all mail from postmaster@example.com and blind-carbon copies administrator@example.com.

Using the filter -> list subcommand, the filters are listed to confirm that they are active and valid, and then the first and last filters are switched in position using the move subcommand. Finally, the changes are committed so that the filters take effect.

mail3.example.com> filters
Choose the operation you want to perform:
- NEW - Create a new filter.
- IMPORT - Import a filter script from a file.
[>] new
Enter filter script. Enter '.' on its own line to end.
big_messages:
    if (body-size >= 10M) {
      drop();
    }
.
1 filters added.

Choose the operation you want to perform:
- NEW - Create a new filter.
- DELETE - Remove a filter.
- IMPORT - Import a filter script from a file.
- EXPORT - Export filters to a file
- MOVE - Move a filter to a different position.
- SET - Set a filter attribute.
- LIST - List the filters.
- DETAIL - Get detailed information on the filters.
- LOGCONFIG - Configure log subscriptions used by filters.
- ROLLOVERNOW - Roll over a filter log file.
[>] new
Enter filter script. Enter '.' on its own line to end.
nomp3s:
    if (attachment-filename == '\.mp3$') {
      drop();
    }
.
1 filters added.

Choose the operation you want to perform:
- NEW - Create a new filter.
- DELETE - Remove a filter.
- IMPORT - Import a filter script from a file.
- EXPORT - Export filters to a file
- MOVE - Move a filter to a different position.
- SET - Set a filter attribute.
- LIST - List the filters.
- DETAIL - Get detailed information on the filters.
Policy Enforcement

- LOGCONFIG - Configure log subscriptions used by filters.
- ROLLOVERNOW - Roll over a filter log file.

[]> new

Enter filter script. Enter '.' on its own line to end.

mailfrompm:
  if (mail-from == "^postmaster$")
    { bcc ("administrator@example.com");}
.
1 filters added.

Choose the operation you want to perform:
- NEW - Create a new filter.
- DELETE - Remove a filter.
- IMPORT - Import a filter script from a file.
- EXPORT - Export filters to a file
- MOVE - Move a filter to a different position.
- SET - Set a filter attribute.
- LIST - List the filters.
- DETAIL - Get detailed information on the filters.
- LOGCONFIG - Configure log subscriptions used by filters.
- ROLLOVERNOW - Roll over a filter log file.

[]> list

policyconfig

Description

Configure per recipient or sender based policies.

Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format.

Examples

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Creating an Incoming Mail Policy to Drop Spam Messages and Archive Suspected Spam Messages

In this example, the `policyconfig` -> `edit` -> `antispam` subcommand is used to edit the Anti-Spam settings for the default incoming mail policy. (Note that this same configuration is available in the GUI from the Email Security Manager feature.)

- First, messages positively identified as spam are chosen not to be archived; they will be dropped.
- Messages that are suspected to be spam are chosen to be archived. They will also be sent to the Spam Quarantine installed on the server named `quarantine.example.com`. The text `quarantined: possible spam` is prepended to the subject line and a special header of `X-quarantined: true` is configured to be added to these suspect messages. In this scenario, Administrators and end-users can check the quarantine for false positives, and an administrator can adjust, if necessary, the suspected spam threshold.

Finally, the changes are committed.

```
mail3.example.com> policyconfig
Would you like to configure Incoming or Outgoing Mail Policies?
1. Incoming
2. Outgoing
[1]> 1
```

```
Incoming Mail Policy Configuration

Name:         Anti-Spam: Anti-Virus: Advanced Graymail: Content Outbreak
--------------- --------------- --------------- --------------- ---------------
------- ------- ------- ------------- --------------- -------
DEFAULT   Ironport Mcafee N/A Off Off Enabled
```

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- PRINT - Print all policies
- FILTERS - Edit content filters

```
[6]> edit
```

```
Name:         Anti-Spam: Anti-Virus: Advanced Graymail: Content Outbreak
--------------- --------------- --------------- --------------- ---------------
------- ------- ------- ------------- --------------- -------
------- ------- ------- ------------- --------------- -------
1. DEFAULT   Ironport Mcafee N/A N/A Off Enabled
```

```
Enter the name or number of the entry you wish to edit:
[6]> 1
```

Policy Summaries:

Anti-Spam: IronPort - Deliver, Prepend "[SPAM] " to Subject
Suspect-Spam: IronPort - Deliver, Prepend "[SUSPECTED SPAM] " to Subject
Anti-Virus: Off
Content Filters: Off (No content filters have been created)

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- OUTBREAK - Modify Outbreak Filters policy
  [] antispam

Choose the operation you want to perform:
- EDIT - Edit Anti-Spam policy
- DISABLE - Disable Anti-Spam policy (Disables all policy-related actions)
  [] edit

Begin Anti-Spam configuration

Some messages will be positively identified as spam. Some messages will be identified as suspected spam. You can set the IronPort Anti-Spam Suspected Spam Threshold below.
The following configuration options apply to messages POSITIVELY identified as spam:
What score would you like to set for the IronPort Anti-Spam spam threshold?
[90]> 90

1. DELIVER
2. DROP
3. BOUNCE
4. IRONPORT QUARANTINE

What do you want to do with messages identified as spam?
[1]> 2

Do you want to archive messages identified as spam? [N]>

Do you want to enable special treatment of suspected spam? [Y]>
y

What score would you like to set for the IronPort Anti-Spam suspect spam threshold?
[50]> 50

The following configuration options apply to messages identified as SUSPECTED spam:
1. DELIVER
2. DROP
3. BOUNCE
4. IRONPORT QUARANTINE

What do you want to do with messages identified as SUSPECTED spam?
[1]> 4

Do you want to archive messages identified as SUSPECTED spam? [N]>
y

1. PREPEND
2. APPEND
3. NONE

Do you want to add text to the subject of messages identified as SUSPECTED spam?
[1]> 1

What text do you want to prepend to the subject?
[[SUSPECTED SPAM] ]> [quarantined: possible spam]

Do you want to add a custom header to messages identified as SUSPECTED spam? [N]>
y

Enter the name of the header:
[] x-quarantined

Enter the text for the content of the header:
[] true

Anti-Spam configuration complete

Policy Summaries:

Anti-Spam: IronPort - Drop
Suspect-Spam: IronPort - Quarantine - Archiving copies of the original message.
Anti-Virus: McAfee - Scan and Clean
Content Filters: Off (No content filters have been created)
Outbreak Filters: Enabled. No bypass extensions.

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- OUTBREAK - Modify Outbreak Filters policy

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- PRINT - Print all policies
- FILTERS - Edit content filters

mail3.example.com> commit

Please enter some comments describing your changes:

configured anti-spam for Incoming Default Policy

Do you want to save the current configuration for rollback? [Y]> n
Changes committed: Fri May 23 11:42:12 2014 GMT

Creating a Policy for the Sales Team

Incoming Mail Policy Configuration

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- PRINT - Print all policies
- FILTERS - Edit content filters

Enter the name for this policy:

sales_team

Begin entering policy members. The following types of entries are allowed:
Username entries such as joe@, domain entries such as @example.com, sub-domain entries such as @.example.com, LDAP group memberships such as ldap(Engineers)

Enter a member for this policy:
Policy Enforcement

[>] ldap(sales)

Please select an LDAP group query:
1. PublicLDAP.ldapgroup
[1]> 1

Is this entry a recipient or a sender?
1. Recipient
2. Sender
[1]> 1

Add another member? [Y]> n

Would you like to enable Anti-Spam support? [Y]> y

Use the policy table default? [Y]> n

Begin Anti-Spam configuration

Some messages will be positively identified as spam. Some messages will be identified as suspected spam. You can set the IronPort Anti-Spam Suspected Spam Threshold below. The following configuration options apply to messages POSITIVELY identified as spam:
What score would you like to set for the IronPort Anti-Spam spam threshold?
[90]> 90

1. DELIVER
2. DROP
3. BOUNCE
4. IRONPORT QUARANTINE

What do you want to do with messages identified as spam?
[1]> 2

Do you want to archive messages identified as spam? [N]> n

Do you want to enable special treatment of suspected spam? [Y]> y

What score would you like to set for the IronPort Anti-Spam suspect spam threshold?
[50]> 50

The following configuration options apply to messages identified as SUSPECTED spam:
1. DELIVER
2. DROP
3. BOUNCE
4. IRONPORT QUARANTINE

What do you want to do with messages identified as SUSPECTED spam?
[1]> 4

Do you want to archive messages identified as SUSPECTED spam? [N]> n

1. PREPEND
2. APPEND
3. NONE

Do you want to add text to the subject of messages identified as SUSPECTED spam?
[1]> 3

Do you want to add a custom header to messages identified as SUSPECTED spam? [N]> n

Anti-Spam configuration complete

Would you like to enable Anti-Virus support? [Y]> y
Use the policy table default? [Y] > y

Would you like to enable Outbreak Filters for this policy? [Y] > y

Use the policy table default? [Y] > y

Incoming Mail Policy Configuration

Name: Anti-Spam: Anti-Virus: Advanced Graymail: Content Outbreak
----- ----------- ----------- -------- ---------- --------
sales_team IronPort Default Default Default Default
DEFAULT Ironport Mcafee N/A Off Off Enabled

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- DELETE - Remove a policy
- PRINT - Print all policies
- SEARCH - Search for a policy by member
- FILTERS - Edit content filters
- CLEAR - Clear all policies

Then, create the policy for the engineering team (three individual email recipients), specifying that `.dwg` files are exempt from Outbreak Filter scanning.

Creating a Policy for the Engineering Team

Incoming Mail Policy Configuration

Name: Anti-Spam: Anti-Virus: Advanced Graymail: Content Outbreak
----- ----------- ----------- -------- ---------- --------
sales_team IronPort Default Default Default Default
DEFAULT Ironport Mcafee N/A Off Off Enabled

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- DELETE - Remove a policy
- PRINT - Print all policies
- SEARCH - Search for a policy by member
- FILTERS - Edit content filters
- CLEAR - Clear all policies

Enter the name for this policy:
[] > engineering

Begin entering policy members. The following types of entries are allowed:
Username entries such as joe@, domain entries such as @example.com, sub-domain entries such as @.example.com, LDAP group memberships such as ldap(Engineers)

Enter a member for this policy:
[.] > bob@example.com

Is this entry a recipient or a sender?
1. Recipient
2. Sender
[.] > 1

Add another member? [Y] > y

Enter a member for this policy:
[.] > fred@example.com

Is this entry a recipient or a sender?
1. Recipient
2. Sender
[.] > 1

Add another member? [Y] > y

Enter a member for this policy:
[.] > joe@example.com

Is this entry a recipient or a sender?
1. Recipient
2. Sender
[.] > 1

Add another member? [Y] > n

Would you like to enable Anti-Spam support? [Y] > y

Use the policy table default? [Y] > y

Would you like to enable Anti-Virus support? [Y] > y

Use the policy table default? [Y] > y

Would you like to enable Outbreak Filters for this policy? [Y] > y

Use the policy table default? [Y] > n

Would you like to modify the list of file extensions that bypass Outbreak Filters? [N] > y

Choose the operation you want to perform:
- NEW - Add a file extension
[.] > new

Enter a file extension:
[.] > dwg

Choose the operation you want to perform:
- NEW - Add a file extension
- DELETE - Delete a file extension
- PRINT - Display all file extensions
- CLEAR - Clear all file extensions
[.] > print

The following file extensions will bypass Outbreak Filter processing:
dwg
Choose the operation you want to perform:
- NEW - Add a file extension
- DELETE - Delete a file extension
- PRINT - Display all file extensions
- CLEAR - Clear all file extensions

Incoming Mail Policy Configuration
Name:    Anti-Spam:  Anti-Virus:  Advanced  Graymail:  Content  Outbreak
---------  --------  --------  --------  --------  -------  --------
sales_team  IronPort  Default  Default  Default  Default  Default
engineering  Default  Default  Default  Default  Default  Enabled
DEFAULT     Ironport  Mcafee  N/A      Off       Off       Enabled

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- DELETE - Remove a policy
- PRINT - Print all policies
- SEARCH - Search for a policy by member
- MOVE - Move the position of a policy
- FILTERS - Edit content filters
- CLEAR - Clear all policies

Next, create three new content filters to be used in the Incoming Mail Overview policy table.

In the CLI, the filters subcommand of the policyconfig command is the equivalent of the Incoming Content Filters GUI page. When you create content filters in the CLI, you must use the save subcommand to save the filter and return to the policyconfig command.

First, create the scan_for_confidential content filter:

Creating the scan_for_confidential Content Filter

Incoming Mail Policy Configuration
Name:    Anti-Spam:  Anti-Virus:  Advanced  Graymail:  Content  Outbreak
---------  --------  --------  --------  --------  -------  --------
sales_team  IronPort  Default  Default  Default  Default  Default
engineering  Default  Default  Default  Default  Default  Enabled
DEFAULT     Ironport  Mcafee  N/A      Off       Off       Enabled

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- DELETE - Remove a policy
- PRINT - Print all policies
- SEARCH - Search for a policy by member
- MOVE - Move the position of a policy
- FILTERS - Edit content filters
- CLEAR - Clear all policies
[] filters

No filters defined.

Choose the operation you want to perform:
- NEW - Create a new filter
[] new

Enter a name for this filter:
[] scan_for_confidential

Enter a description or comment for this filter (optional):
[] scan all incoming mail for the string 'confidential'

Filter Name:  scan_for_confidential

Conditions:
- Always Run

Actions:
- No actions defined yet.

Description:
- scan all incoming mail for the string 'confidential'

Choose the operation you want to perform:
- RENAME - Rename this filter
- DESC - Edit filter description
- ADD - Add condition or action
[] add

1. Condition
2. Action
[] 1

1. Message Body Contains
2. Only Body Contains (Attachments are not scanned)
3. Message Body Size
4. Subject Header
5. Other Header
6. Attachment Contains
7. Attachment File Type
8. Attachment Name
9. Attachment MIME Type
10. Attachment Protected
11. Attachment Unprotected
12. Attachment Corrupt
13. Envelope Recipient Address
14. Envelope Recipient in LDAP Group
15. Envelope Sender Address
16. Envelope Sender in LDAP Group
17. Reputation Score
18. Remote IP
19. DKIM authentication result
20. SPF verification result
[] 1

Enter regular expression or smart identifier to search message contents for:
[] confidential

Threshold required for match:
[] 1

Filter Name:  scan_for_confidential
Conditions:
body-contains("confidential", 1)

Actions:
No actions defined yet.

Description:
scan all incoming mail for the string 'confidential'

Choose the operation you want to perform:
- RENAME - Rename this filter
- DESC - Edit filter description
- ADD - Add condition or action
- DELETE - Delete condition or action

[>] add

1. Condition
2. Action

[1]> 2

1. Bcc
2. Notify
3. Redirect To Alternate Email Address
4. Redirect To Alternate Host
5. Insert A Custom Header
6. Insert A Message Tag
7. Strip A Header
8. Send From Specific IP Interface
9. Drop Attachments By Content
10. Drop Attachments By Name
11. Drop Attachments By MIME Type
12. Drop Attachments By File Type
13. Drop Attachments By Size
14. Send To System Quarantine
15. Duplicate And Send To System Quarantine
16. Add Log Entry
17. Drop (Final Action)
18. Bounce (Final Action)
19. Skip Remaining Content Filters (Final Action)
20. Encrypt (Final Action)
21. Encrypt on Delivery
22. Skip Outbreak Filters check

[1]> 1

Enter the email address(es) to send the Bcc message to:

[]> hr@example.com

Do you want to edit the subject line used on the Bcc message? [N]> y

Enter the subject to use:

[]$Subject$> [message matched confidential filter]

Do you want to edit the return path of the Bcc message? [N]> n

Filter Name: scan_for_confidential

Conditions:
body-contains("confidential", 1)

Actions:
bcc("hr@example.com", "[message matched confidential filter]")

Description:
scan all incoming mail for the string 'confidential'

Choose the operation you want to perform:
- RENAME - Rename this filter
- DESC - Edit filter description
- ADD - Add condition or action
- DELETE - Delete condition or action
- SAVE - Save filter

[>] add

1. Condition
2. Action
[1]> 2

1. Bcc
2. Notify
3. Redirect To Alternate Email Address
4. Redirect To Alternate Host
5. Insert A Custom Header
6. Insert A Message Tag
7. Strip A Header
8. Send From Specific IP Interface
9. Drop Attachments By Content
10. Drop Attachments By Name
11. Drop Attachments By MIME Type
12. Drop Attachments By File Type
13. Drop Attachments By Size
14. Send To System Quarantine
15. Duplicate And Send To System Quarantine
16. Add Log Entry
17. Drop (Final Action)
18. Bounce (Final Action)
19. Skip Remaining Content Filters (Final Action)
20. Encrypt (Final Action)
21. Encrypt on Delivery
22. Skip Outbreak Filters check
[1]> 14

1. Policy
[1]> 1

Filter Name: scan_for_confidential

Conditions:
body-contains("confidential", 1)

Actions:
bcc ("hr@example.com", "[message matched confidential filter]")
quarantine ("Policy")

Description:
scan all incoming mail for the string 'confidential'

Choose the operation you want to perform:
- RENAME - Rename this filter
- DESC - Edit filter description
- ADD - Add condition or action
- DELETE - Delete condition or action
- MOVE - Reorder the conditions or actions
- SAVE - Save filter

[>] save

Defined filters:
1. scan_for_confidential: scan all incoming mail for the string 'confidential'
Choose the operation you want to perform:
- NEW - Create a new filter
- EDIT - Edit an existing filter
- DELETE - Delete a filter
- PRINT - Print all filters
- RENAME - Rename a filter

Creating the `no_mp3s` and `ex_employee` Content Filters

Choose the operation you want to perform:
- NEW - Create a new filter
- EDIT - Edit an existing filter
- DELETE - Delete a filter
- PRINT - Print all filters
- RENAME - Rename a filter

Enter a name for this filter:

```
[>] no_mp3s
```

Enter a description or comment for this filter (optional):

```
[>] strip all MP3 attachments
```

Filter Name: no_mp3s

Conditions:
Always Run

Actions:
No actions defined yet.

Description:
strip all MP3 attachments

Choose the operation you want to perform:
- RENAME - Rename this filter
- DESC - Edit filter description
- ADD - Add condition or action

```
[>] add
```

1. Condition
2. Action

```
[1]> 2
```

1. Bcc
2. Notify
3. Redirect To Alternate Email Address
4. Redirect To Alternate Host
5. Insert A Custom Header
6. Insert A Message Tag
7. Strip A Header
8. Send From Specific IP Interface
9. Drop Attachments By Content
10. Drop Attachments By Name
11. Drop Attachments By MIME Type
12. Drop Attachments By File Type
13. Drop Attachments By Size
14. Send To System Quarantine
15. Duplicate And Send To System Quarantine
16. Add Log Entry
17. Drop (Final Action)
18. Bounce (Final Action)
19. Skip Remaining Content Filters (Final Action)
20. Encrypt (Final Action)
21. Encrypt on Delivery
22. Skip Outbreak Filters check

[>] 12

Enter the file type to strip:
[>] mp3

Do you want to enter specific text to use in place of any stripped attachments?[N]> n

Filter Name: no_mp3s

Conditions:
Always Run

Actions:
drop-attachments-by-filetype("mp3")

Description:
strip all MP3 attachments

Choose the operation you want to perform:
- RENAME - Rename this filter
- DESC - Edit filter description
- ADD - Add condition or action
- SAVE - Save filter
[>] save

Defined filters:
1. scan_for_confidential: scan all incoming mail for the string 'confidential'
2. no_mp3s: strip all MP3 attachments

Choose the operation you want to perform:
- NEW - Create a new filter
- EDIT - Edit an existing filter
- DELETE - Delete a filter
- PRINT - Print all filters
- MOVE - Reorder a filter
- RENAME - Rename a filter
[>] new

Enter a name for this filter:
[>] ex_employee

Enter a description or comment for this filter (optional):
[>] bounce messages intended for Doug

Filter Name: ex_employee

Conditions:
Always Run

Actions:
No actions defined yet.

Description:
bounce messages intended for Doug

Choose the operation you want to perform:
- RENAME - Rename this filter
- DESC - Edit filter description
- ADD - Add condition or action
[]> add
1. Condition
2. Action
[1]> 1

1. Message Body Contains
2. Only Body Contains (Attachments are not scanned)
3. Message Body Size
4. Subject Header
5. Other Header
6. Attachment Contains
7. Attachment File Type
8. Attachment Name
9. Attachment MIME Type
10. Attachment Protected
11. Attachment Unprotected
12. Attachment Corrupt
13. Envelope Recipient Address
14. Envelope Recipient in LDAP Group
15. Envelope Sender Address
16. Envelope Sender in LDAP Group
17. Reputation Score
18. Remote IP
19. DKIM authentication result
20. SPF verification result
[1]> 13

Enter regular expression to search Recipient address for:
[]> doug

Filter Name: ex_employee

Conditions:
rcpt-to == "doug"

Actions:
No actions defined yet.

Description:
bounce messages intended for Doug

Choose the operation you want to perform:
- RENAME - Rename this filter
- DESC - Edit filter description
- ADD - Add condition or action
- DELETE - Delete condition or action
[]> add

1. Condition
2. Action
[1]> 2

1. Bcc
2. Notify
3. Redirect To Alternate Email Address
4. Redirect To Alternate Host
5. Insert A Custom Header
6. Insert A Message Tag
7. Strip A Header
8. Send From Specific IP Interface
9. Drop Attachments By Content
10. Drop Attachments By Name
11. Drop Attachments By MIME Type
12. Drop Attachments By File Type
13. Drop Attachments By Size
14. Send To System Quarantine
15. Duplicate And Send To System Quarantine
16. Add Log Entry
17. Drop (Final Action)
18. Bounce (Final Action)
19. Skip Remaining Content Filters (Final Action)
20. Encrypt (Final Action)
21. Encrypt on Delivery
22. Skip Outbreak Filters check

[1]> 2

Enter the email address(es) to send the notification to:
[]> joe@example.com

Do you want to edit the subject line used on the notification? [N] > y

Enter the subject to use:
[]> message bounced for ex-employee of example.com

Do you want to edit the return path of the notification? [N] > n

Do you want to include a copy of the original message as an attachment to the notification? [N] > y

Filter Name: ex_employee

Conditions:
rcpt-to == "doug"

Actions:
notify-copy ("joe@example.com", "message bounced for ex-employee of example.com")

Description:
bounce messages intended for Doug

Choose the operation you want to perform:
  - RENAME - Rename this filter
  - DESC - Edit filter description
  - ADD - Add condition or action
  - DELETE - Delete condition or action
  - SAVE - Save filter

[1]> add

1. Condition
2. Action

[1]> 2

1. Bcc
2. Notify
3. Redirect To Alternate Email Address
4. Redirect To Alternate Host
5. Insert A Custom Header
6. Insert A Message Tag
7. Strip A Header
8. Send From Specific IP Interface
9. Drop Attachments By Content
10. Drop Attachments By Name
11. Drop Attachments By MIME Type
12. Drop Attachments By File Type
13. Drop Attachments By Size
14. Send To System Quarantine
15. Duplicate And Send To System Quarantine
16. Add Log Entry
17. Drop (Final Action)
18. Bounce (Final Action)
19. Skip Remaining Content Filters (Final Action)
20. Encrypt (Final Action)
21. Encrypt on Delivery
22. Skip Outbreak Filters check

[1]> 18

Filter Name: ex_employee

Conditions:
rcpt-to == "doug"

Actions:
notify-copy ("joe@example.com", "message bounced for ex-employee of example.com")
bounce()

Description:
bounce messages intended for Doug

Choose the operation you want to perform:
- RENAME - Rename this filter
- DESC - Edit filter description
- ADD - Add condition or action
- DELETE - Delete condition or action
- SAVE - Save filter

[1]> save

Defined filters:
1. scan_for_confidential: scan all incoming mail for the string 'confidential'
2. no_mp3s: strip all MP3 attachments
3. ex_employee: bounce messages intended for Doug

Choose the operation you want to perform:
- NEW - Create a new filter
- EDIT - Edit an existing filter
- DELETE - Delete a filter
- PRINT - Print all filters
- MOVE - Reorder a filter
- RENAME - Rename a filter

Incoming Mail Policy Configuration

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Advanced Malware</th>
<th>Graymail</th>
<th>Content Filter</th>
<th>Outbreak Filters</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales_team</td>
<td>IronPort</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
</tr>
<tr>
<td>engineering</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Enabled</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>Ironport</td>
<td>Mcafee</td>
<td>N/A</td>
<td>Off</td>
<td>Off</td>
<td>Enabled</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- DELETE - Remove a policy
- PRINT - Print all policies
- SEARCH - Search for a policy by member
Enabling Content Filters for Specific Policies

Code Example illustrates how to enable the policies once again to enable the content filters for some policies, but not for others.

```
Incoming Mail Policy Configuration

Name:          Anti-Spam:          Anti-Virus:       Advanced Malware Protection:          
--------------- --------------- --------------- --------------- -------------------------- 
 sales_team     IronPort           Default          Default          Default           Default          
 engineering    Default           Default          Default          Default           Enabled          
 DEFAULT        Ironport           McAfee           N/A              Off              Off             Enabled
```

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- DELETE - Remove a policy
- PRINT - Print all policies
- SEARCH - Search for a policy by member
- MOVE - Move the position of a policy
- FILTERS - Edit content filters
- CLEAR - Clear all policies

`[]> edit

Name:          Anti-Spam:          Anti-Virus:       Advanced Malware Protection:          
--------------- --------------- --------------- --------------- -------------------------- 
 1. sales_team     IronPort           Default          Default          Default           Default          
 2. engineering    Default           Default          Default          Default           Enabled          
 3. DEFAULT        Ironport           McAfee           N/A              Off              Off             Enabled
```

Enter the name or number of the entry you wish to edit:
`[]> 3

Policy Summaries:

Anti-Spam: IronPort - Drop
Suspect-Spam: IronPort - Quarantine - Archiving copies of the original message.
Anti-Virus: McAfee - Scan and Clean
Graymail Detection: Unsubscribe - Disabled
Content Filters: Off
Outbreak Filters: Enabled. No bypass extensions.

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- GRAYMAIL - Modify Graymail policy
- OUTBREAK - Modify Outbreak Filters policy
- FILTERS - Modify filters

Choose the operation you want to perform:
- ENABLE - Enable Content Filters policy

[]> enable

1. scan_for_confidential
2. no_mp3s
3. ex_employee
Enter the filter to toggle on/off, or press enter to finish:

[]> 1

1. Active scan_for_confidential
2. no_mp3s
3. ex_employee
Enter the filter to toggle on/off, or press enter to finish:

[]> 2

1. Active scan_for_confidential
2. Active no_mp3s
3. Active ex_employee
Enter the filter to toggle on/off, or press enter to finish:

[]>

Policy Summaries:

Anti-Spam: IronPort - Drop
Suspect-Spam: IronPort - Quarantine - Archiving copies of the original message.
Anti-Virus: McAfee - Scan and Clean
Graymail Detection: Unsubscribe - Disabled
Content Filters: Enabled. Filters: scan_for_confidential, no_mp3s, ex_employee
Outbreak Filters: Enabled. No bypass extensions.

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- GRAYMAIL - Modify Graymail policy
- OUTBREAK - Modify Outbreak Filters policy
- FILTERS - Modify filters

Incoming Mail Policy Configuration

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Advanced Malware Protection</th>
<th>Graymail</th>
<th>Content Filter</th>
<th>Outbreak Filters</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales_team</td>
<td>IronPort</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
</tr>
<tr>
<td>engineering</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Enabled</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>Ironport</td>
<td>McAfee</td>
<td>N/A</td>
<td>Off</td>
<td>Enabled</td>
<td>Enabled</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
Policy Enforcement

- NEW - Create a new policy
- EDIT - Edit an existing policy
- DELETE - Remove a policy
- PRINT - Print all policies
- SEARCH - Search for a policy by member
- MOVE - Move the position of a policy
- FILTERS - Edit content filters
- CLEAR - Clear all policies

[]> edit

Enter the name or number of the entry you wish to edit: 
[]> 2

Policy Summaries:

Anti-Spam: Default
Anti-Virus: Default
Graymail Detection: Unsubscribe - Default
Content Filters: Default
Outbreak Filters: Enabled. Bypass extensions: dwg

Choose the operation you want to perform:
- NAME - Change name of policy
- NEW - Add a new member
- DELETE - Remove a member
- PRINT - Print policy members
- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- GRAYMAIL - Modify Graymail policy
- OUTBREAK - Modify Outbreak Filters policy
- FILTERS - Modify filters
[]> filters

Choose the operation you want to perform:
- DISABLE - Disable Content Filters policy (Disables all policy-related actions)
- ENABLE - Enable Content Filters policy
[]> enable

1. scan_for_confidential
2. no_mp3s
3. ex_employee

Enter the filter to toggle on/off, or press enter to finish:
[]> 1

1. Active scan_for_confidential
2. no_mp3s
3. ex_employee

Enter the filter to toggle on/off, or press enter to finish:
[]> 3
1. Active scan_for_confidential
2. no_mp3s
3. Active ex_employee
Enter the filter to toggle on/off, or press enter to finish:

Policy Summaries:

Anti-Spam: Default
Anti-Virus: Default
Graymail Detection: Unsubscribe • Default
Content Filters: Enabled. Filters: scan_for_confidential, ex_employee
Outbreak Filters: Enabled. Bypass extensions: dwg

Choose the operation you want to perform:
- NAME • Change name of policy
- NEW • Add a new member
- DELETE • Remove a member
- PRINT • Print policy members
- ANTIISPAM • Modify Anti-Spam policy
- ANTIVIRUS • Modify Anti-Virus policy
- GRAYMAIL • Modify Graymail policy
- OUTBREAK • Modify Outbreak Filters policy
- FILTERS • Modify filters

Incoming Mail Policy Configuration

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Advanced</th>
<th>Graymail</th>
<th>Content</th>
<th>Outbreak</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales_team</td>
<td>IronPort</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
</tr>
<tr>
<td>engineering</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Enabled</td>
<td>Enabled</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>Ironport</td>
<td>Mcafee</td>
<td>N/A</td>
<td>Off</td>
<td>Enabled</td>
<td>Enabled</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- NEW • Create a new policy
- EDIT • Edit an existing policy
- DELETE • Remove a policy
- PRINT • Print all policies
- SEARCH • Search for a policy by member
- MOVE • Move the position of a policy
- FILTERS • Edit content filters
- CLEAR • Clear all policies

Note
The CLI does not contain the notion of adding a new content filter within an individual policy. Rather, the filters subcommand forces you to manage all content filters from within one subsection of the policyconfig command. For that reason, adding the drop_large_attachments has been omitted from this example.

DLP Policies for Default Outgoing Policy

This illustrates how to enable DLP policies on the default outgoing policy.

mail3.example.com> policyconfig
Would you like to configure Incoming or Outgoing Mail Policies?
1. Incoming
2. Outgoing
[1]> 2

Outgoing Mail Policy Configuration

<table>
<thead>
<tr>
<th>Name:</th>
<th>Anti-Spam:</th>
<th>Anti-Virus:</th>
<th>Advanced Malware Protection:</th>
<th>Graymail:</th>
<th>Content Filter:</th>
<th>Outbreak Filters:</th>
<th>DLP:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- PRINT - Print all policies
- FILTERS - Edit content filters
[1]> edit

<table>
<thead>
<tr>
<th>Name:</th>
<th>Anti-Spam:</th>
<th>Anti-Virus:</th>
<th>Advanced Malware Protection:</th>
<th>Graymail:</th>
<th>Content Filter:</th>
<th>Outbreak Filters:</th>
<th>DLP:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DEFAULT</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
<td>Off</td>
</tr>
</tbody>
</table>

Enter the name or number of the entry you wish to edit:
[1]> 1

Policy Summaries:

Anti-Spam: Off
Anti-Virus: Off
Graymail Detection: Unsubscribe - Disabled
Content Filters: Off (No content filters have been created)
Outbreak Filters: Off
DLP: Off

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- GRAYMAIL - Modify Graymail policy
- OUTBREAK - Modify Outbreak Filters policy
- DLP - Modify DLP policy
[1]> dlp

Choose the operation you want to perform:
- ENABLE - Enable DLP policy
[1]> enable

1. California AB-1298
2. Suspicious Transmission - Zip Files
3. Restricted Files
Enter the policy to toggle on/off, or press enter to finish:
[1]> 1

1. Active California AB-1298
2. Suspicious Transmission - Zip Files
3. Restricted Files
Chapter 3      The Commands: Reference Examples

Policy Enforcement

Enter the policy to toggle on/off, or press enter to finish:

[>] 2

1. Active California AB-1298
2. Active Suspicious Transmission - Zip Files
3. Restricted Files

Enter the policy to toggle on/off, or press enter to finish:

[>] 3

1. Active California AB-1298
2. Active Suspicious Transmission - Zip Files
3. Active Restricted Files

Enter the policy to toggle on/off, or press enter to finish:

Policy Summaries:

Anti-Spam: Off
Anti-Virus: Off
Graymail Detection: Unsubscribe - Disabled
Content Filters: Off (No content filters have been created)
Outbreak Filters: Off
DLP: Enabled. Policies: California AB-1298, Suspicious Transmission - Zip Files, Restricted Files

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- ANTVIRUS - Modify Anti-Virus policy
- GRAYMAIL - Modify Graymail policy
- OUTBREAK - Modify Outbreak Filters policy
- DLP - Modify DLP policy

Create an Incoming Policy to Drop the Messages Identified as Bulk Email or Social Network Email

mail.example.com> policyconfig

Would you like to configure Incoming or Outgoing Mail Policies?
1. Incoming
2. Outgoing

[1]> 1

Incoming Mail Policy Configuration

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Advanced</th>
<th>Graymail</th>
<th>Content</th>
<th>Outbreak</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>Off</td>
<td>N/A</td>
<td>N/A</td>
<td>Off</td>
<td>Off</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- NEW - Create a new policy
- EDIT - Edit an existing policy
- PRINT - Print all policies
- FILTERS - Edit content filters

[>] edit
Policy Enforcement

Enter the name or number of the entry you wish to edit:
[]> 1

Policy Summaries:

Anti-Spam: Off
Graymail Detection: Off
Content Filters: Off (No content filters have been created)

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- GRAYMAIL - Modify Graymail policy
- FILTERS - Modify filters
[]> graymail

Choose the operation you want to perform:
- ENABLE - Enable Graymail policy
[]> enable

Begin Graymail configuration

Do you want to enable Safe Unsubscribe? [N]> y

Do you want to perform Safe Unsubscribe action only for unsigned messages (recommended)? [Y>

Do you want to enable actions on messages identified as Marketing Email? [N]> y

Do you want to enable actions on messages identified as Social Networking Email? [N]> y

1. DELIVER
2. DROP
3. BOUNCE
What do you want to do with messages identified as Social Networking Email? [1]> 2

Do you want to archive messages identified as Social Networking Email? [N]> y

Do you want to enable actions on messages identified as Bulk Email? [N]> y

1. DELIVER
2. DROP
3. BOUNCE
What do you want to do with messages identified as Bulk Email? [1]> 2

Do you want to archive messages identified as Bulk Email? [N]>

Graymail configuration complete.

Policy Summaries:

Anti-Spam: Off
quarantineconfig

Description

Configure system quarantines.

Usage

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command is restricted to machine mode.

**Batch Command:** This command does not support a batch format.

Example

```plaintext
mail3.example.com> quarantineconfig

Currently configured quarantines:

<table>
<thead>
<tr>
<th>#</th>
<th>Quarantine Name</th>
<th>Size (MB)</th>
<th>% full</th>
<th>Messages</th>
<th>Retention</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Outbreak</td>
<td>3,072</td>
<td>0.0</td>
<td>1</td>
<td>12h</td>
<td>Release</td>
</tr>
<tr>
<td>2</td>
<td>Policy</td>
<td>1,024</td>
<td>0.1</td>
<td>497</td>
<td>10d</td>
<td>Delete</td>
</tr>
<tr>
<td>3</td>
<td>Virus</td>
<td>2,048</td>
<td>empty</td>
<td>0</td>
<td>30d</td>
<td>Delete</td>
</tr>
</tbody>
</table>

2,048 MB available for quarantine allocation.

Choose the operation you want to perform:
- NEW - Create a new quarantine.
- EDIT - Modify a quarantine.
- DELETE - Remove a quarantine.
- OUTBREAKMANAGE - Manage the Outbreak Filters quarantine.

[>] new

Please enter the name for this quarantine:

[>] HRQuarantine

Retention period for this quarantine. (Use 'd' for days or 'h' for hours or 'm' for 'minutes').

[>] 15d

1. Delete
2. Release

Enter default action for quarantine:

[1] > 2

Do you want to modify the subject of messages that are released because "HRQuarantine" overflows? [N]>
```
Do you want to add a custom header to messages that are released because "HRQuarantine" overflows? [N]>

Do you want to strip all attachments from messages that are released because "HRQuarantine" overflows? [N]>

Do you want default action to apply automatically when quarantine space fills up? [Y]>

Currently configured quarantines:

<table>
<thead>
<tr>
<th>#</th>
<th>Quarantine Name</th>
<th>Size (MB)</th>
<th>% full</th>
<th>Messages</th>
<th>Retention</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>HRQuarantine</td>
<td>1,024</td>
<td>N/A</td>
<td>N/A</td>
<td>15d</td>
<td>Release</td>
</tr>
<tr>
<td>2</td>
<td>Outbreak</td>
<td>3,072</td>
<td>0.0</td>
<td>1</td>
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<td>3</td>
<td>Policy</td>
<td>1,024</td>
<td>0.1</td>
<td>497</td>
<td>10d</td>
<td>Delete</td>
</tr>
<tr>
<td>4</td>
<td>Virus</td>
<td>2,048</td>
<td>empty</td>
<td>0</td>
<td>30d</td>
<td>Delete</td>
</tr>
</tbody>
</table>

(N/A: Quarantine contents is not available at this time.)

1,024 MB available for quarantine allocation.

Choose the operation you want to perform:
- NEW - Create a new quarantine.
- EDIT - Modify a quarantine.
- DELETE - Remove a quarantine.
- OUTBREAKMANAGE - Manage the Outbreak Filters quarantine.

**Users and Quarantines**

Once you answer “y” or yes to the question about adding users, you begin user management, where you can manage the user list. This lets you add or remove multiple users to the quarantine without having to go through the other quarantine configuration questions. Press Return (Enter) at an empty prompt ([>] to exit the user management section and continue with configuring the quarantine.

_Note_

You will only be prompted to give users access to the quarantine if guest or operator users have already been created on the system.

A quarantine's user list only contains users belonging to the Operators or Guests groups. Users in the Administrators group always have full access to the quarantine. When managing the user list, the NEW command is suppressed if all the Operator/Guest users are already on the quarantine's user list. Similarly, DELETE is suppressed if there are no users to delete.

**scanconfig**

**Description**

Configure attachment scanning policy

**Usage**

Commit: This command requires a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command supports a batch format.

Example

In this example, the `scanconfig` command sets these parameters:
- MIME types of video/*, audio/*, image/* are skipped (not scanned for content).
- Nested (recursive) archive attachments up to 10 levels are scanned. (The default is 5 levels.)
- The maximum size for attachments to be scanned is 25 megabytes; anything larger will be skipped. (The default is 5 megabytes.)
- The document metadata is scanned.
- Attachment scanning timeout is set at 180 seconds.
- Attachments that were not scanned are assumed to not match the search pattern. (This is the default behavior.)
- ASCII encoding is configured for use when none is specified for plain body text or anything with MIME type plain/text or plain/html.

```
mail3.example.com> scanconfig
There are currently 5 attachment type mappings configured to be SKIPPED.
Choose the operation you want to perform:
  - NEW - Add a new entry.
  - DELETE - Remove an entry.
  - SETUP - Configure scanning behavior.
  - IMPORT - Load mappings from a file.
  - EXPORT - Save mappings to a file.
  - PRINT - Display the list.
  - CLEAR - Remove all entries.
  - SMIME - Configure S/MIME unpacking.
[?] > setup
1. Scan only attachments with MIME types or fingerprints in the list.
2. Skip attachments with MIME types or fingerprints in the list.
Choose one:
[2] > 2

Enter the maximum depth of attachment recursion to scan:
[5] > 10

Enter the maximum size of attachment to scan:
[5242880] > 10m

Do you want to scan attachment metadata? [Y] > y

Enter the attachment scanning timeout (in seconds):
[30] > 180

If a message has attachments that were not scanned for any reason (e.g. because of size, depth limits, or scanning timeout), assume the attachment matches the search pattern? [N] > n
```
If a message could not be deconstructed into its component parts in order to remove specified attachments, the system should:

1. Deliver
2. Bounce
3. Drop

Configure encoding to use when none is specified for plain body text or anything with MIME type plain/text or plain/html.

1. US-ASCII
2. Unicode (UTF-8)
3. Unicode (UTF-16)
4. Western European/Latin-1 (ISO 8859-1)
5. Western European/Latin-1 (Windows CP1252)
6. Traditional Chinese (Big 5)
7. Simplified Chinese (GB 2312)
8. Simplified Chinese (HZ GB 2312)
11. Japanese (Shift-JIS (X0123))
13. Japanese (EUC)

Scan behavior changed.

There are currently 5 attachment type mappings configured to be SKIPPED.

Choose the operation you want to perform:
- NEW - Add a new entry.
- DELETE - Remove an entry.
- SETUP - Configure scanning behavior.
- IMPORT - Load mappings from a file.
- EXPORT - Save mappings to a file.
- PRINT - Display the list.
- CLEAR - Remove all entries.
- SMIME - Configure S/MIME unpacking.

1. Fingerprint Image
2. Fingerprint Media
3. MIME Type audio/*
4. MIME Type image/*
5. MIME Type video/*

stripheaders

Description

Define a list of message headers to remove.

Usage

**Commit**: This command requires a ‘commit’.

**Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

mail3.example.com> stripheaders

Not currently stripping any headers.

Choose the operation you want to perform:
- SETUP - Set message headers to remove.
[]> setup

Enter the list of headers you wish to strip from the messages before they are delivered. Separate multiple headers with commas.
[]> Delivered-To

Currently stripping headers: Delivered-To

Choose the operation you want to perform:
- SETUP - Set message headers to remove.
[]>

mail3.example.com>

textconfig

Description

Configure text resources such as anti-virus alert templates, message disclaimers, and notification templates, including DLP, bounce, and encryption notifications.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

Use textconfig -> NEW to create text resources, and textconfig > delete to remove them.

mail3.example.com> textconfig

Choose the operation you want to perform:
- NEW - Create a new text resource.
- IMPORT - Import a text resource from a file.
[]> new

What kind of text resource would you like to create?
1. Anti-Virus Container Template
2. Anti-Virus Notification Template
3. DLP Notification Template
4. Bounce and Encryption Failure Notification Template
5. Message Disclaimer
6. Encryption Notification Template (HTML)
7. Encryption Notification Template (text)
8. Notification Template

[1]> 5

Please create a name for the message disclaimer:
[1]> disclaimer 1

Enter the encoding for the message disclaimer:
1. US-ASCII
2. Unicode (UTF-8)
3. Unicode (UTF-16)
4. Western European/Latin-1 (ISO 8859-1)
5. Western European/Latin-1 (Windows CP1252)
6. Traditional Chinese (Big 5)
7. Simplified Chinese (GB 2312)
8. Simplified Chinese (HZ GB 2312)
11. Japanese (Shift·JIS (X0123))
13. Japanese (EUC)
[1>

Enter or paste the message disclaimer here. Enter '.' on a blank line to end.
This message was sent from an IronPort(tm) Email Security appliance.
.
Message disclaimer "disclaimer 1" created.

Choose the operation you want to perform:
- NEW - Create a new text resource.
- IMPORT - Import a text resource from a file.
- EXPORT - Export text resource to a file.
- PRINT - Display the content of a resource.
- EDIT - Modify a resource.
- DELETE - Remove a resource from the system.
- LIST - List configured resources.
[1]> delete

Please enter the name or number of the resource to delete:
[1]> 1

Message disclaimer "disclaimer 1" has been deleted.

Choose the operation you want to perform:
- NEW - Create a new text resource.
- IMPORT - Import a text resource from a file.
[1>

Use textconfig -> EDIT to modify an existing text resource. You can change the encoding or replace the text of the selected text resource.
Importing Text Resources

Use `textconfig -> IMPORT` to import a text file as a text resource. The text file must be present in the configuration directory on the appliance.

```
mail3.example.com> textconfig
```

Current Text Resources:
1. footer.2.message (Message Footer)

Choose the operation you want to perform:
- NEW - Create a new text resource.
- IMPORT - Import a text resource from a file.
- EXPORT - Export text resource to a file.
- PRINT - Display the content of a resource.
- EDIT - Modify a resource.
- DELETE - Remove a resource from the system.
- LIST - List configured resources.

```
[1]> import
```

What kind of text resource would you like to create?
1. Anti-Virus Container Template
2. Anti-Virus Notification Template
3. DLP Notification Template
4. Bounce and Encryption Failure Notification Template
5. Message Disclaimer
6. Encryption Notification Template (HTML)
7. Encryption Notification Template (text)
8. Notification Template

```
[1]> 8
```

Please create a name for the notification template:
```
[1]> strip.mp3files
```

Enter the name of the file to import:
```
[1]> strip.mp3.txt
```

Enter the encoding to use for the imported file:
1. US-ASCII
[ list of encodings ]

```
[1]> 
```

Notification template "strip.mp3files" created.

Current Text Resources:
1. disclaimer.2.message (Message Disclaimer)
2. strip.mp3files (Notification Template)

Choose the operation you want to perform:
- NEW - Create a new text resource.
- IMPORT - Import a text resource from a file.
- EXPORT - Export text resource to a file.
- PRINT - Display the content of a resource.
- EDIT - Modify a resource.
- DELETE - Remove a resource from the system.
- LIST - List configured resources.

```
[1]> 
```

Exporting Text Resources

Use `textconfig -> EXPORT` to export a text resource as a text file. The text file will be created in the configuration directory on the appliance.
mail3.example.com> textconfig

Current Text Resources:
1. footer.2.message (Message Footer)
2. strip.mp3 (Notification Template)

Choose the operation you want to perform:
- NEW - Create a new text resource.
- IMPORT - Import a text resource from a file.
- EXPORT - Export text resource to a file.
- PRINT - Display the content of a resource.
- EDIT - Modify a resource.
- DELETE - Remove a resource from the system.
- LIST - List configured resources.

[]> export

Please enter the name or number of the resource to export:
[]> 2

Enter the name of the file to export:
[strip.mp3]> strip.mp3.txt

Enter the encoding to use for the exported file:
1. US-ASCII
[ list of encoding types ]
[1]>

File written on machine "mail3.example.com" using us-ascii encoding.

Current Text Resources:
1. footer.2.message (Message Footer)
2. strip.mp3 (Notification Template)

Choose the operation you want to perform:
- NEW - Create a new text resource.
- IMPORT - Import a text resource from a file.
- EXPORT - Export text resource to a file.
- PRINT - Display the content of a resource.
- EDIT - Modify a resource.
- DELETE - Remove a resource from the system.
- LIST - List configured resources.

[]>

Logging and Alerts

This section contains the following CLI commands:
- alertconfig
- displayalerts
- findevent
- grep
- logconfig
- rollovernow
- snmpconfig
- tail
alertconfig

Description

Configure email alerts.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example: Creating a New Alert

In this example, a new alert recipient (alertadmin@example.com) is created and set to receive critical system, hardware, and directory harvest attack alerts.

```
vm30esa0086.ibqa> alertconfig

Not sending alerts (no configured addresses)

Alerts will be sent using the system-default From Address.

Cisco IronPort AutoSupport: Disabled

Choose the operation you want to perform:
- NEW - Add a new email address to send alerts.
- SETUP - Configure alert settings.
- FROM - Configure the From Address of alert emails.
[]> new

Please enter a new email address to send alerts.
(Ex: "administrator@example.com")
[]> alertadmin@example.com

Choose the Alert Classes. Separate multiple choices with commas.
1. All
2. System
3. Hardware
4. Updater
5. Outbreak Filters
6. Anti-Virus
7. Anti-Spam
8. Directory Harvest Attack Prevention
9. Release and Support Notifications
[1]> 2,3,8

Select a Severity Level. Separate multiple choices with commas.
1. All
2. Critical
3. Warning
4. Information
[1]> 2

Sending alerts to:
alertadmin@example.com
   Class: Hardware - Severities: Critical
Class: Directory Harvest Attack Prevention - Severities: Critical
Class: System - Severities: Critical

Initial number of seconds to wait before sending a duplicate alert: 300
Maximum number of seconds to wait before sending a duplicate alert: 3600
Maximum number of alerts stored in the system are: 50

Alerts will be sent using the system-default From Address.
Cisco IronPort AutoSupport: Disabled

Choose the operation you want to perform:
- NEW - Add a new email address to send alerts.
- EDIT - Modify alert subscription for an email address.
- DELETE - Remove an email address.
- CLEAR - Remove all email addresses (disable alerts).
- SETUP - Configure alert settings.
- FROM - Configure the From Address of alert emails.

displayalerts

Description
Display the last n alerts sent by the appliance

Usage
Commit: This command does not require a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

  > displayalerts

  Date and Time Stamp          Description
  -----------------------------
  10 Mar 2015 11:33:36 +0000   The updater could not validate the server certificate.
  Server certificate not validated - unable to get local issuer certificate

  Last message occurred 28 times between Tue Mar 10 10:34:57 2015 and Tue Mar 10 11:32:24 2015.

  10 Mar 2015 11:23:39 +0000   The updater has been unable to communicate with the update server for at least 1h.

10 Mar 2015 10:33:36 +0000    The updater could not validate the server certificate. Server certificate not validated - unable to get local issuer certificate


10 Mar 2015 10:23:39 +0000    The updater has been unable to communicate with the update server for at least 1h.

Last message occurred 9 times between Tue Mar 10 09:26:54 2015 and Tue Mar 10 10:22:56 2015.

findevent

Description

Find events in mail log files

Usage

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

**Example: Search by envelope FROM**

```
mail.example.com> findevent

Please choose which type of search you want to perform:
1. Search by envelope FROM
2. Search by Message ID
3. Search by Subject
4. Search by envelope TO
[1]> 1

Enter the regular expression to search for.
[1]> 

Currently configured logs:

<table>
<thead>
<tr>
<th>Log Name</th>
<th>Log Type</th>
<th>Retrieval</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>mail_logs</td>
<td>IronPort Text Mail Logs</td>
<td>Manual Download</td>
<td>None</td>
</tr>
</tbody>
</table>

Enter the number of the log you wish to use for message tracking.
[1]> 1

Please choose which set of logs to search:
1. All available log files
2. Select log files by date list
3. Current log file
[3]> 3

No matching message IDs were found
```
Example: Search by Message ID

mail.example.com> findevent

Please choose which type of search you want to perform:
1. Search by envelope FROM
2. Search by Message ID
3. Search by Subject
4. Search by envelope TO

[1]> 2

Enter the Message ID (MID) to search for.

[1]> 1

Currently configured logs:

<table>
<thead>
<tr>
<th>Log Name</th>
<th>Log Type</th>
<th>Retrieval</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>mail_logs</td>
<td>IronPort Text Mail Logs</td>
<td>Manual Download</td>
<td>None</td>
</tr>
</tbody>
</table>

Enter the number of the log you wish to use for message tracking.

[1]> 1

Please choose which set of logs to search:
1. All available log files
2. Select log files by date list
3. Current log file

[3]> 1

No matching message IDs were found

Example: Search by Subject

mail.example.com> findevent

Please choose which type of search you want to perform:
1. Search by envelope FROM
2. Search by Message ID
3. Search by Subject
4. Search by envelope TO

[1]> 3

Enter the regular expression to search for.

[1]> "

Currently configured logs:

<table>
<thead>
<tr>
<th>Log Name</th>
<th>Log Type</th>
<th>Retrieval</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>mail_logs</td>
<td>IronPort Text Mail Logs</td>
<td>Manual Download</td>
<td>None</td>
</tr>
</tbody>
</table>

Enter the number of the log you wish to use for message tracking.

[1]> 1

Please choose which set of logs to search:
1. All available log files
2. Select log files by date list
3. Current log file

[3]> 2

Available mail log files, listed by log file start time. Specify multiple log files by separating with commas or specify a range with a dash:
1. Thu Feb 19 05:18:02 2015

[1]>
Example: Search by envelope TO

mail.example.com> findevent

Please choose which type of search you want to perform:
1. Search by envelope FROM
2. Search by Message ID
3. Search by Subject
4. Search by envelope TO
[1] > 4

Enter the regular expression to search for.
[1] > '

Currently configured logs:
<table>
<thead>
<tr>
<th>Log Name</th>
<th>Log Type</th>
<th>Retrieval</th>
<th>Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. mail_logs</td>
<td>IronPort Text Mail Logs</td>
<td>Manual Download</td>
<td>None</td>
</tr>
</tbody>
</table>

Enter the number of the log you wish to use for message tracking.
[1] > 1

Please choose which set of logs to search:
1. All available log files
2. Select log files by date list
3. Current log file
[3] > 3

No matching message IDs were found

grep

Description

Searches for text in a log file.

Usage

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.

**Batch Command:** This command does not support a batch format.

The `grep` command can be used to search for text strings within logs. Use the following syntax when you run the `grep` command:

```
grep [-C count] [-e regex] [-i] [-p] [-t] [regex] log_name
```

**Note** You must enter either `-e regex` or `regex` to return results.
Use the following options when you run the **grep** command:

---

**Table 3-11: grep Command Options**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>-C</td>
<td>Provides lines of context around the grep pattern found. Enter a value to specify the number of lines to include.</td>
</tr>
<tr>
<td>-e</td>
<td>Enter a regular expression.</td>
</tr>
<tr>
<td>-i</td>
<td>Ignores case sensitivities.</td>
</tr>
<tr>
<td>-p</td>
<td>Paginates the output.</td>
</tr>
<tr>
<td>-t</td>
<td>Runs the grep command over the tail of the log file.</td>
</tr>
<tr>
<td>regex</td>
<td>Enter a regular expression.</td>
</tr>
</tbody>
</table>

---

**Example of grep**

The following example shows a search for the text string ‘clean’ or ‘viral’ within the antivirus logs. The grep command includes a regex expression:

```
mail3.example.com> grep "CLEAN\|VIRAL" antivirus
```

Fri Jun 9 21:50:25 2006 Info: sophos antivirus - MID 1 - Result 'CLEAN' ()
Fri Jun 9 21:53:15 2006 Info: sophos antivirus - MID 2 - Result 'CLEAN' ()
Fri Jun 9 22:47:41 2006 Info: sophos antivirus - MID 3 - Result 'CLEAN' ()
Fri Jun 9 22:47:41 2006 Info: sophos antivirus - MID 4 - Result 'CLEAN' ()
Fri Jun 9 22:47:41 2006 Info: sophos antivirus - MID 5 - Result 'CLEAN' ()
Fri Jun 9 22:47:41 2006 Info: sophos antivirus - MID 6 - Result 'CLEAN' ()
Fri Jun 9 22:47:41 2006 Info: sophos antivirus - MID 12 - Result 'CLEAN' ()
Fri Jun 9 22:53:04 2006 Info: sophos antivirus - MID 18 - Result 'VIRAL' ()
Fri Jun 9 22:53:05 2006 Info: sophos antivirus - MID 16 - Result 'VIRAL' ()
Fri Jun 9 22:53:06 2006 Info: sophos antivirus - MID 19 - Result 'VIRAL' ()
Fri Jun 9 22:53:07 2006 Info: sophos antivirus - MID 21 - Result 'VIRAL' ()
Fri Jun 9 22:53:08 2006 Info: sophos antivirus - MID 20 - Result 'VIRAL' ()
Fri Jun 9 22:53:08 2006 Info: sophos antivirus - MID 22 - Result 'VIRAL' ()

---

**logconfig**

**Description**

Configure access to log files.

**Usage**

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.
Example of FTP Push Log Subscription

In the following example, the `logconfig` command is used to configure a new delivery log called `myDeliveryLogs`. The log is then configured to be pushed via FTP to a remote host `mail3.example.com`.

```
mail3.example.com> logconfig
```

Currently configured logs:
1. "antispam" Type: "Anti-Spam Logs" Retrieval: FTP Poll
2. "antivirus" Type: "Anti-Virus Logs" Retrieval: FTP Poll
3. "asarchive" Type: "Anti-Spam Archive" Retrieval: FTP Poll
5. "avarchive" Type: "Anti-Virus Archive" Retrieval: FTP Poll
6. "bounces" Type: "Bounce Logs" Retrieval: FTP Poll
7. "cli_logs" Type: "CLI Audit Logs" Retrieval: FTP Poll
8. "encryption" Type: "Encryption Logs" Retrieval: FTP Poll
9. "error_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
11. "eqqlogs" Type: "IronPort Spam Quarantine GUI Logs" Retrieval: FTP Poll
13. "gui_logs" Type: "HTTP Logs" Retrieval: FTP Poll
14. "mail_log" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
15. "report_log" Type: "Reporting Logs" Retrieval: FTP Poll
17. "scanning" Type: "Scanning Logs" Retrieval: FTP Poll
18. "sibid_logs" Type: "Safe/Block Lists Logs" Retrieval: FTP Poll
19. "smtp_log" Type: "SMTP logs" Retrieval: FTP Poll
20. "status" Type: "Status Logs" Retrieval: FTP Poll
22. "tracker_log" Type: "Tracking Logs" Retrieval: FTP Poll
23. "updater_log" Type: "Updater Logs" Retrieval: FTP Poll

Choose the operation you want to perform:
- NEW - Create a new log.
- EDIT - Modify a log subscription.
- DELETE - Remove a log subscription.
- SETUP - General settings.
- LOGHEADERS - Configure headers to log.
- HOSTKEYCONFIG - Configure SSH host keys.

```
[]> new
```

Choose the log file type for this subscription:
1. IronPort Text Mail Logs
2. qmail Format Mail Logs
3. Delivery Logs
4. Bounce Logs
5. Status Logs
6. Domain Debug Logs
7. Injection Debug Logs
8. SMTP Conversation Logs
9. System Logs
10. CLI Logs
11. FTP Server Logs
12. HTTP Logs
13. NTP logs
14. LDAP Debug Logs
15. Anti-Spam Logs
16. Anti-Spam Archive
17. Anti-Virus Logs
18. Anti-Virus Archive
19. Scanning Logs
20. IronPort Spam Quarantine Logs
21. IronPort Spam Quarantine GUI Logs
22. Reporting Logs
23. Reporting Query Logs
24. Updater Logs
25. Tracking Logs
26. Safe/Block Lists Logs
27. Authentication Logs

> 8

Please enter the name for the log:
> myDeliveryLogs

Choose the method to retrieve the logs.
1. FTP Poll
2. FTP Push
3. SCP Push
4. Syslog Push

> 2

Hostname to deliver the logs:
> yourhost.example.com

Username on the remote host:
> yourusername

Password for youruser:
> thepassword

Directory on remote host to place logs:
> /logs

Filename to use for log files:
> conversation.text

Maximum time to wait before transferring:
> 3600

Maximum filesize before transferring:
> 10485760

Currently configured logs:
1. "antispam" Type: "Anti-Spam Logs" Retrieval: FTP Poll
2. "antivirus" Type: "Anti-Virus Logs" Retrieval: FTP Poll
3. "asarchive" Type: "Anti-Spam Archive" Retrieval: FTP Poll
5. "avarchive" Type: "Anti-Virus Archive" Retrieval: FTP Poll
6. "bounces" Type: "Bounce Logs" Retrieval: FTP Poll
7. "cli_logs" Type: "CLI Audit Logs" Retrieval: FTP Poll
8. "encryption" Type: "Encryption Logs" Retrieval: FTP Poll
9. "error_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
10. "eug_logs" Type: "IronPort Spam Quarantine Logs" Retrieval: FTP Poll
11. "eugui_logs" Type: "IronPort Spam Quarantine GUI Logs" Retrieval: FTP Poll
12. "ftpd_logs" Type: "FTP Server Logs" Retrieval: FTP Poll
13. "gui_logs" Type: "HTTP Logs" Retrieval: FTP Poll
14. "mail_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
15. "myDeliveryLogs" Type: "SMTP Conversation Logs" Retrieval: FTP Push - Host yourhost.example.com
16. "reportd_logs" Type: "Reporting Logs" Retrieval: FTP Poll
17. "reportqueryd_logs" Type: "Reporting Query Logs" Retrieval: FTP Poll
18. "scanning" Type: "Scanning Logs" Retrieval: FTP Poll
20. "sntpd_logs" Type: "NTP logs" Retrieval: FTP Poll
22. "system_logs" Type: "System Logs" Retrieval: FTP Poll
23. "trackerd_logs" Type: "Tracking Logs" Retrieval: FTP Poll
24. "updater_logs" Type: "Updater Logs" Retrieval: FTP Poll

Example of SCP Push Log Subscription

In the following example, the `logconfig` command is used to configure a new delivery log called LogPush. The log is configured to be pushed via SCP to a remote host with the IP address of 10.1.1.1, as the user `logger`, and stored in the directory `/tmp`. Note that the `sshconfig` command is automatically called from within the `logconfig` command when the log retrieval method is SCP push. (See “Configuring Host Keys” for information about Host keys, and “Managing Secure Shell (SSH) Keys” for more information about User keys, in the User Guide for AsyncOS for Cisco Email Security Appliances.) Also note that an IP address can be used at the hostname prompt.

```
mail3.example.com> logconfig
```

Currently configured logs:
1. "antispam" Type: "Anti-Spam Logs" Retrieval: FTP Poll
2. "antivirus" Type: "Anti-Virus Logs" Retrieval: FTP Poll
3. "asarchive" Type: "Anti-Spam Archive" Retrieval: FTP Poll
5. "avarchive" Type: "Anti-Virus Archive" Retrieval: FTP Poll
6. "bounces" Type: "Bounce Logs" Retrieval: FTP Poll
7. "cli_logs" Type: "CLI Audit Logs" Retrieval: FTP Poll
8. "encryption" Type: "Encryption Logs" Retrieval: FTP Poll
9. "error_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
10. "euq_logs" Type: "IronPort Spam Quarantine Logs" Retrieval: FTP Poll
11. "euqgui_logs" Type: "IronPort Spam Quarantine GUI Logs" Retrieval: FTP Poll
12. "ftpd_logs" Type: "FTP Server Logs" Retrieval: FTP Poll
13. "gui_logs" Type: "HTTP Logs" Retrieval: FTP Poll
14. "mail_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
15. "reportd_logs" Type: "Reporting Logs" Retrieval: FTP Poll
16. "reportqueryd_logs" Type: "Reporting Query Logs" Retrieval: FTP Poll
17. "scanning" Type: "Scanning Logs" Retrieval: FTP Poll
18. "sibld_logs" Type: "Safe/Block Lists Logs" Retrieval: FTP Poll
19. "snntp_logs" Type: "NTP logs" Retrieval: FTP Poll
20. "status" Type: "Status Logs" Retrieval: FTP Poll
22. "trackerd_logs" Type: "Tracking Logs" Retrieval: FTP Poll
23. "updater_logs" Type: "Updater Logs" Retrieval: FTP Poll

Choose the operation you want to perform:
- NEW - Create a new log.
- EDIT - Modify a log subscription.
- DELETE - Remove a log subscription.
- SETUP - General settings.
- LOGHEADERS - Configure headers to log.
- HOSTKEYCONFIG - Configure SSH host keys.

```
[+]> new
```

Choose the log file type for this subscription:
1. IronPort Text Mail Logs
2. qmail Format Mail Logs
3. Delivery Logs
4. Bounce Logs
5. Status Logs
6. Domain Debug Logs
7. Injection Debug Logs
8. SMTP Conversation Logs
9. System Logs
10. CLI Audit Logs
11. FTP Server Logs
12. HTTP Logs
13. NTP logs
14. LDAP Debug Logs
15. Anti-Spam Logs
16. Anti-Spam Archive
17. Anti-Virus Logs
18. Anti-Virus Archive
19. Scanning Logs
20. IronPort Spam Quarantine Logs
21. IronPort Spam Quarantine GUI Logs
22. Reporting Logs
23. Reporting Query Logs
24. Updater Logs
25. Tracking Logs
26. Safe/Block Lists Logs
27. Authentication Logs

[1]> 3

Please enter the name for the log:
[1]> LogPush

Choose the method to retrieve the logs.
1. FTP Poll
2. FTP Push
3. SCP Push
[1]> 3

Hostname to deliver the logs:
[1]> 10.1.1.1

Port to connect to on the remote host:
[22]> 22

Username on the remote host:
[1]> logger

Directory on remote host to place logs:
[1]> /tmp

Filename to use for log files:
delivery.log>

Maximum time to wait before transferring:
[3600]> 3600

Maximum filesize before transferring:
[1048576]> 1048576

Protocol:
1. SSH1
2. SSH2
[2]> 2

Do you want to enable host key checking?  [N]> y

Do you want to automatically scan the host for its SSH key, or enter it manually?
1. Automatically scan.
2. Enter manually.
[1]> 1
SSH2:dsa
10.1.1.1 ssh-dss
AAAAB3NzaC1kc3MAACBBALWGi4ILWDVndbIwEsArt5LEVE2ts5yE9JBTGdUWLvoq0G3FRqifrce92zyHTc/ZWyXav
UTIM3XdbIpEcscMe2XKpsNpFXz2y8bqkpJssCQcM8zZMDjnpOFMsghlWXYh7oNEUUCPNpxAy44rlJSY4x9eIoAL
p0dH00Gr+j1NAAAFQDQGQI5Y/X9P1DM3fPVMvEXJwcc0eldWAAAIB9cgMTEFF1WTA0r1RtbwZF5zWZtVDTxLhdXzjlo
4+b48hBR7DKuc80+naPFnhYH/J8R3LJVF795MseKjBxzuJGD3Zw13UYefPqBxp2p01zLsQsJyxi1WwYz/rooopN
1BnF4sh12mtq3d1176bGqtwaQA4wKO15k3zOWsPwAAAAIcRYat3y+B1v/V6w6E6BBk9+uULv3eK38gafup4WMBx
k90G06EQ18nss82oznWBy/pITRQfih4NMbmlxTF4VEY0osARrltUJC1QQVYi8G7NdYNaia2SfBEkinFOF6+SX2
RNpcUf3Wg92xtqQPKMcZeLtK2ZJRkhC+Vx==
Add the preceding host key(s) for 10.1.1.? [Y]> y
Currently installed host keys:
1. 10.1.1.1 1024 35 12260642076447444117847407996206675325...3520565607
2. 10.1.1.1 ssh-dss AAAAB3NzaC1kc3MAACBBALWGi4ILWDVndbIw...JRkhC+Vx==
Choose the operation you want to perform:
- NEW - Add a new key.
- EDIT - Modify a key.
- DELETE - Remove a key.
- SCAN - Automatically download a host key.
- PRINT - Display a key.
- HOST - Display this machine's host keys.
[1]> Maximum filesize before transferring:
[10485760]
Protocol:
1. SSH1
2. SSH2
[2]> 2
Do you want to enable host key checking? [N]> y
Currently installed host keys:
Choose the operation you want to perform:
- NEW - Add a new key.
- SCAN - Automatically download a host key.
- HOST - Display this machine's host keys.
[1]> scan
Choose the ssh protocol type:
1. SSH1:rsa
2. SSH2:rsa
3. SSH2:dsa
4. All
[4]> 4
SSH1:rsa
10.1.1.1 1024 35
122606420764474441178474079962066753259278682648965870690129496065430424463013457294798980
6278298280397315222646869451431621827821445398693161250828322080815740071209975632356478
5321288161878068307463282342777810103112817667266624451119178374796589800855947022484692
079466697707373948871554575173520565607
Example of Syslog Push Log Subscription

In the following example, the `logconfig` command is used to configure a new delivery log called `MailLogSyslogPush`. The log is configured to be pushed to a remote syslog server with the IP address of 10.1.1.2, using UDP, with a 'mail' facility and stored in the directory.

```
mail3.example.com> logconfig

Currently configured logs:
1. "antispam" Type: "Anti-Spam Logs" Retrieval: FTP Poll
2. "antivirus" Type: "Anti-Virus Logs" Retrieval: FTP Poll
3. "asarchive" Type: "Anti-Spam Archive" Retrieval: FTP Poll
5. "avarchive" Type: "Anti-Virus Archive" Retrieval: FTP Poll
6. "bounces" Type: "Bounce Logs" Retrieval: FTP Poll
7. "cli_logs" Type: "CLI Audit Logs" Retrieval: FTP Poll
8. "encryption" Type: "Encryption Logs" Retrieval: FTP Poll
9. "error_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
10. "euq_logs" Type: "IronPort Spam Quarantine Logs" Retrieval: FTP Poll
11. "euqgui_logs" Type: "IronPort Spam Quarantine GUI Logs" Retrieval: FTP Poll
12. "ftpd_logs" Type: "FTP Server Logs" Retrieval: FTP Poll
13. "gui_logs" Type: "HTTP Logs" Retrieval: FTP Poll
14. "mail_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
15. "reportd_logs" Type: "Reporting Logs" Retrieval: FTP Poll
16. "reportqueryd_logs" Type: "Reporting Query Logs" Retrieval: FTP Poll
17. "scanning" Type: "Scanning Logs" Retrieval: FTP Poll
18. "slbld_logs" Type: "Safe/Block Lists Logs" Retrieval: FTP Poll
19. "sntpd_logs" Type: "NTP logs" Retrieval: FTP Poll
20. "status" Type: "Status Logs" Retrieval: FTP Poll
22. "trackerd_logs" Type: "Tracking Logs" Retrieval: FTP Poll
23. "updater_logs" Type: "Updater Logs" Retrieval: FTP Poll

Choose the operation you want to perform:
- NEW - Create a new log.
- EDIT - Modify a log subscription.
- DELETE - Remove a log subscription.
- SETUP - General settings.
- LOGHEADERS - Configure headers to log.
- HOSTKEYCONFIG - Configure SSH host keys.

:new

Choose the log file type for this subscription:
1. IronPort Text Mail Logs
2. qmail Format Mail Logs
3. Delivery Logs
4. Bounce Logs
5. Status Logs
6. Domain Debug Logs
7. Injection Debug Logs
8. SMTP Conversation Logs
9. System Logs
10. CLT Audit Logs
11. FTP Server Logs
12. HTTP Logs
13. NTP logs
14. LDAP Debug Logs
15. Anti-Spam Logs
16. Anti-Spam Archive
17. Anti-Virus Logs
18. Anti-Virus Archive
19. Scanning Logs
20. IronPort Spam Quarantine Logs
21. IronPort Spam Quarantine GUI Logs
22. Reporting Logs
23. Reporting Query Logs
24. Updater Logs
25. Tracking Logs
26. Safe/Block Lists Logs
27. Authentication Logs

[1] > 1

Please enter the name for the log:

Log level:
1. Critical
2. Warning
3. Information
4. Debug
5. Trace
[3] > 2

Choose the method to retrieve the logs.
1. FTP Poll
2. FTP Push
3. SCP Push
4. Syslog Push
[1] > 4

Hostname to deliver the logs:
[1] > 10.1.1.2

Which protocol do you want to use to transfer the log data?
1. UDP
2. TCP
[1] > 1

Which facility do you want the log data to be sent as?
1. auth
2. authpriv
3. console
4. daemon
5. ftp
6. local0
7. local1
8. local2
9. local3
10. local4
11. local5
12. local6
13. local7
14. mail
15. ntp
16. security
17. user
[14] > 14

Currently configured logs:
rollovernow

Description
Roll over a log file.

Usage
Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example
mail3.example.com> rollovernow

Currently configured logs:
1. "antispam" Type: "Anti-Spam Logs" Retrieval: FTP Poll
2. "antivirus" Type: "Anti-Virus Logs" Retrieval: FTP Poll
3. "asarchive" Type: "Anti-Spam Archive" Retrieval: FTP Poll
5. "avarchive" Type: "Anti-Virus Archive" Retrieval: FTP Poll
6. "bounces" Type: "Bounce Logs" Retrieval: FTP Poll
7. "cli_logs" Type: "CLI Audit Logs" Retrieval: FTP Poll
8. "encryption" Type: "Encryption Logs" Retrieval: FTP Poll
9. "error_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
10. "euq_logs" Type: "IronPort Spam Quarantine Logs" Retrieval: FTP Poll
11. "eugui_logs" Type: "IronPort Spam Quarantine GUI Logs" Retrieval: FTP Poll
12. "ftpd_logs" Type: "FTP Server Logs" Retrieval: FTP Poll
13. "gui_logs" Type: "HTTP Logs" Retrieval: FTP Poll
14. "mail_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
15. "reportd_logs" Type: "Reporting Logs" Retrieval: FTP Poll
16. "reportqueryd_logs" Type: "Reporting Query Logs" Retrieval: FTP Poll
17. "scanning" Type: "Scanning Logs" Retrieval: FTP Poll
18. "slbld_logs" Type: "Safe/Block Lists Logs" Retrieval: FTP Poll
19. "snmpd_logs" Type: "NTP logs" Retrieval: FTP Poll
20. "status" Type: "Status Logs" Retrieval: FTP Poll
22. "trackerd_logs" Type: "Tracking Logs" Retrieval: FTP Poll
23. "updater_logs" Type: "Updater Logs" Retrieval: FTP Poll
24. All Logs
Which log would you like to roll over?
{}> 2

Log files successfully rolled over.
mail3.example.com>

snmpconfig

Description
Configure SNMP.
Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format.

Example

In the following example, the `snmpconfig` command is used to enable SNMP on the “PublicNet” interface on port 161. A passphrase for version 3 is entered and then re-entered for confirmation. The system is configured to service version 1 and 2 requests, and the community string `public` is entered for GET requests from those versions 1 and 2. The trap target of `snmp-monitor.example.com` is entered. Finally, system location and contact information is entered.

```
mail3.example.com> snmpconfig
Current SNMP settings:
SNMP Disabled.
Choose the operation you want to perform:
  · SETUP - Configure SNMP.
[>] setup
Do you want to enable SNMP? [N]> y
Please choose an IP interface for SNMP requests.
1. Data 1 (192.168.1.1/24: buttercup.run)
2. Data 2 (192.168.2.1/24: buttercup.run)
3. Management (192.168.44.44/24: buttercup.run)
[1]
Enter the SNMPv3 passphrase.
>
Please enter the SNMPv3 passphrase again to confirm.
>
Which port shall the SNMP daemon listen on?
[161]> 161
Service SNMP V1/V2c requests? [N]> y
Enter the SNMP V1/V2c community string.
[>] public
From which network shall SNMP V1/V2c requests be allowed?
[192.168.2.0/24] 192.168.2.0/24
Enter the Trap target (IP address). Enter "None" to disable traps.
[None] > snmp-monitor.example.com
Enterprise Trap Status
1. RAIDStatusChange   Enabled
2. fanFailure         Enabled
3. highTemperature    Enabled
4. keyExpiration      Enabled
5. linkDown           Enabled
6. linkUp             Enabled
7. powerSupplyStatusChange   Enabled
8. resourceConservationMode Enabled
9. updateFailure      Enabled
Do you want to change any of these settings? [N]> y
```
Do you want to disable any of these traps? [Y]>

Enter number or numbers of traps to disable. Separate multiple numbers with commas. []> 1,8

Enterprise Trap Status
1. RAIDStatusChange             Disabled
2. fanFailure                   Enabled
3. highTemperature             Enabled
4. keyExpiration                Enabled
5. linkDown                     Enabled
6. linkUp                       Enabled
7. powerSupplyStatusChange      Enabled
8. resourceConservationMode     Disabled
9. updateFailure                Enabled
Do you want to change any of these settings? [N]>

Enter the System Location string.
[Unknown: Not Yet Configured]> Network Operations Center - west; rack #31, position 2

Enter the System Contact string.
[snmp@localhost]> Joe Administrator, x8888

Current SNMP settings:
Listening on interface "Data 1" 192.168.2.1/24 port 161.
SNMP v3: Enabled.
SNMP v1/v2: Enabled, accepting requests from subnet 192.168.2.0/24.
SNMP v1/v2 Community String: public
Trap target: snmp-monitor.example.com
Location: Network Operations Center - west; rack #31, position 2
System Contact: Joe Administrator, x8888

mail3.example.com> tail

tail

Description
Continuously display the end of a log file. The tail command also accepts the name or number of a log
to view as a parameter: tail 9 or tail mail_logs.

Usage
Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode. It is further restricted to the login
host (i.e., the specific machine you are logged onto). This command requires access to the local file
system.
Batch Command: This command does not support a batch format.

Example

mail3.example.com> tail
Currently configured logs:
1. "antispam" Type: "Anti-Spam Logs" Retrieval: FTP Poll
2. "antivirus" Type: "Anti-Virus Logs" Retrieval: FTP Poll
3. "asarchive" Type: "Anti-Spam Archive" Retrieval: FTP Poll
5. "avarchive" Type: "Anti-Virus Archive" Retrieval: FTP Poll
6. "bounces" Type: "Bounce Logs" Retrieval: FTP Poll
7. "cli_logs" Type: "CLI Audit Logs" Retrieval: FTP Poll
8. "encryption" Type: "Encryption Logs" Retrieval: FTP Poll
9. "error_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
10. "euq_logs" Type: "IronPort Spam Quarantine Logs" Retrieval: FTP Poll
11. "euqgui_logs" Type: "IronPort Spam Quarantine GUI Logs" Retrieval: FTP Poll
12. "ftpd_logs" Type: "FTP Server Logs" Retrieval: FTP Poll
13. "gui_logs" Type: "HTTP Logs" Retrieval: FTP Poll
14. "mail_logs" Type: "IronPort Text Mail Logs" Retrieval: FTP Poll
15. "reportd_logs" Type: "Reporting Logs" Retrieval: FTP Poll
16. "reportqueryd_logs" Type: "Reporting Query Logs" Retrieval: FTP Poll
17. "scanning" Type: "Scanning Logs" Retrieval: FTP Poll
18. "slbld_logs" Type: "Safe/Block Lists Logs" Retrieval: FTP Poll
19. "sntpd_logs" Type: "NTP logs" Retrieval: FTP Poll
20. "status" Type: "Status Logs" Retrieval: FTP Poll
22. "trackerd_logs" Type: "Tracking Logs" Retrieval: FTP Poll
23. "updater_logs" Type: "Updater Logs" Retrieval: FTP Poll

Enter the number of the log you wish to tail.

[>] 19

Press Ctrl-C to stop.

Sat May 15 23:18:10 2008 Info: PID 19626: User admin commit changes:
Sat May 15 23:18:10 2008 Info: PID 274: User system commit changes: Updated filter logs config
Sat May 15 23:48:17 2008 Info: PID 25696: User admin commit changes:
Sun May 16 00:00:00 2008 Info: Generated report: name b, start time Sun May 16 00:00:00 2004, size 2154 bytes
*Cmail3.example.com>

**Reporting**

This section contains the following CLI commands:

- reportingconfig
reportingconfig

Using the reportingconfig command

The following subcommands are available within the reportingconfig submenu:

<table>
<thead>
<tr>
<th>Syntax</th>
<th>Description</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>filters</td>
<td>Configure filters for the Security Management appliance.</td>
<td>M-Series only</td>
</tr>
<tr>
<td>alert_timeout</td>
<td>Configure when you will be alerted due to failing to get reporting data.</td>
<td>M-Series only</td>
</tr>
<tr>
<td>domain</td>
<td>Configure domain report settings.</td>
<td>M-Series only</td>
</tr>
<tr>
<td>mode</td>
<td>Enable centralized reporting on the Security Management appliance.</td>
<td>C-, M-Series</td>
</tr>
<tr>
<td>mailsetup</td>
<td>Configure reporting for the Email Security appliance.</td>
<td>C-Series only</td>
</tr>
</tbody>
</table>

Usage

Commit: This command requires a ‘commit’.

Example: Enabling Reporting Filters (M-Series only)

mail3.example.com> reportingconfig

Choose the operation you want to perform:
- FILTERS - Configure filtering for the SMA.
- ALERT_TIMEOUT - Configure when you will be alerted due to failing to get reporting data
- DOMAIN - Configure domain report settings.
- MODE - Enable/disable centralized reporting.

[>] filters

Filters remove specific sets of centralized reporting data from the "last year" reports. Data from the reporting groups selected below will not be recorded.

All filtering has been disabled.

1. No Filtering enabled
2. IP Connection Level Detail.
3. User Detail.
4. Mail Traffic Detail.
Choose which groups to filter, you can specify multiple filters by entering a comma separated list:

[>] 2, 3

Choose the operation you want to perform:
- FILTERS - Configure filtering for the SMA.
- ALERT_TIMEOUT - Configure when you will be alerted due to failing to get
Enabling HAT REJECT Information for Domain Reports (M-Series only)

```
mail3.example.com> reportingconfig
```

Choose the operation you want to perform:
- FILTERS - Configure filtering for the SMA.
- ALERT_TIMEOUT - Configure when you will be alerted due to failing to get reporting data
- DOMAIN - Configure domain report settings.
- MODE - Enable/disable centralized reporting.

```
[>] domain
```

If you have configured HAT REJECT policy on all remote appliances providing reporting data to this appliance to occur at the message recipient level then of domain reports.

```
Use message recipient HAT REJECT information for domain reports? [N]> y
```

Choose the operation you want to perform:
- FILTERS - Configure filtering for the SMA.
- ALERT_TIMEOUT - Configure when you will be alerted due to failing to get reporting data
- DOMAIN - Configure domain report settings.
- MODE - Enable/disable centralized reporting.

```
[>] alert_timeout
```

An alert will be sent if reporting data has not been fetched from an appliance after 360 minutes.
Would you like timeout alerts to be enabled? [Y]> y

```
After how many minutes should an alert be sent? [360]> 240
```

Choose the operation you want to perform:
- FILTERS - Configure filtering for the SMA.
- ALERT_TIMEOUT - Configure when you will be alerted due to failing to get reporting data
- DOMAIN - Configure domain report settings.
- MODE - Enable/disable centralized reporting.

```
[>] 
```
Enabling Centralized Reporting for an Email Security Appliance

`mail3.example.com> reportingconfig`

Choose the operation you want to perform:
- MAILSETUP - Configure reporting for the ESA.
- MODE - Enable centralized or local reporting for the ESA.

`[>] mode`

Centralized reporting: Local reporting only.

Do you want to enable centralized reporting? [N]> y

Choose the operation you want to perform:
- MAILSETUP - Configure reporting for the ESA.
- MODE - Enable centralized or local reporting for the ESA.

`[>]`

Configure Storage Limit for Reporting Data (C-Series only)

`mail.example.com> reportingconfig`

Choose the operation you want to perform:
- MAILSETUP - Configure reporting for the ESA.
- MODE - Enable centralized or local reporting for the ESA.

`[>] mailsetup`

SenderBase timeout used by the web interface: 5 seconds
Sender Reputation Multiplier: 3
The current level of reporting data recording is: unlimited
No custom second level domains are defined.
Legacy mailflow report: Disabled

Choose the operation you want to perform:
- SENDERBASE - Configure SenderBase timeout for the web interface.
- MULTIPLIER - Configure Sender Reputation Multiplier.
- COUNTERS - Limit counters recorded by the reporting system.
- throttling - Limit unique hosts tracked for rejected connection reporting.
- TLD - Add customer specific domains for reporting rollup.
- STORAGE - How long centralized reporting data will be stored on the C-series before being overwritten.
- LEGACY - Configure legacy mailflow report.

`[>] storage`

While in centralized mode the C-series will store reporting data for the M-series to collect. If the M-series does not collect that data then eventually the C-series will begin to overwrite the oldest data with new data.
A maximum of 24 hours of reporting data will be stored.
How many hours of reporting data should be stored before data loss? [24]> 48

SenderBase timeout used by the web interface: 5 seconds
Sender Reputation Multiplier: 3
The current level of reporting data recording is: unlimited
No custom second level domains are defined.
Legacy mailflow report: Disabled
Choose the operation you want to perform:
- SENDERBASE - Configure SenderBase timeout for the web interface.
- MULTIPLIER - Configure Sender Reputation Multiplier.
- COUNTERS - Limit counters recorded by the reporting system.
- THROTTLING - Limit unique hosts tracked for rejected connection reporting.
- TLD - Add customer specific domains for reporting rollup.
- STORAGE - How long centralized reporting data will be stored on the C-series before being overwritten.
- LEGACY - Configure legacy mailflow report.

Senderbase

This section contains the following CLI commands:

- **sbstatus**
- **senderbaseconfig**

**sbstatus**

**Description**

Display status of SenderBase queries.

**Usage**

**Commit**: This command requires a ‘commit’.

**Cluster Management**: This command can be used in all three machine modes (cluster, group, machine).

**Batch Command**: This command does not support a batch format.

**Example**

```
mail3.example.com> sbstatus
SenderBase host status
Status as of: Tue Oct 21 10:55:04 2003
Host up/down: up

If the appliance is unable to contact the SenderBase Reputation Service, or the service has never been contacted, the following is displayed:

mail3.example.com> sbstatus
SenderBase host status
Host up/down: Unknown (never contacted)
```
**senderbaseconfig**

**Description**

Configure SenderBase connection settings.

**Usage**

Commit: This command requires a 'commit'.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command does not support a batch format.

**Example**

```
mail3.example.com> senderbaseconfig
Share statistics with SenderBase Information Service: Enabled

Choose the operation you want to perform:
- SETUP - Configure SenderBase Network Participation settings
{}> setup

Do you want to share statistical data with the SenderBase Information Service (recommended)? [Y]> 
Share statistics with SenderBase Information Service: Enabled

Choose the operation you want to perform:
- SETUP - Configure SenderBase Network Participation settings
{}>
```

**SMTP Services Configuration**

This section contains the following CLI commands:

- **callaheadconfig**
- **listenerconfig**
- **localeconfig**
- **smtpauthconfig**

**callaheadconfig**

**Description**

Add, edit, and remove SMTP Call-Ahead profiles
Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

In the following example you can create a new SMTP call-ahead profile for delivery host.

```plaintext
> callaheadconfig

No SMTP Call-Ahead profiles are configured on the system.

Choose the operation you want to perform:
- NEW - Create a new profile.

[1]> new

Select the type of profile you want to create:
1. Delivery Host
2. Static Call-Ahead Servers

[1]> 1

Please enter a name for the profile:

[1]> delhost01

Advanced Settings:
MAIL FROM Address: <>
Interface: Auto
Timeout Value: 30
Validation Failure Action: ACCEPT
Temporary Failure Action: REJECT with same code
Maximum number of connections: 5
Maximum number of validation queries: 1000
Cache size: 10000
Cache TTL: 900

Do you want to change advanced settings? [N]> n

Currently configured SMTP Call-Ahead profiles:
1. delhost01 (Delivery Host)

Choose the operation you want to perform:
- NEW - Create a new profile.
- EDIT - Modify a profile.
- DELETE - Delete a profile.
- PRINT - Display profile information.
- TEST - Test profile.
- FLUSHCACHE - Flush SMTP Call-Ahead cache.

[1]>
```

In the following example you can create a new SMTP call-ahead profile for call ahead server.

```plaintext
> callaheadconfig

Currently configured SMTP Call-Ahead profiles:
1. delhost01 (Delivery Host)

Choose the operation you want to perform:
- NEW - Create a new profile.
- EDIT - Modify a profile.
- DELETE - Delete a profile.
```
SMTP Services Configuration

The listenerconfig command allows you to create, edit, and delete a listener. AsyncOS requires that you specify criteria that messages must meet in order to be accepted and then relayed to recipient hosts — either internal to your network or to external recipients on the Internet.

Description

The listenerconfig command allows you to create, edit, and delete a listener. AsyncOS requires that you specify criteria that messages must meet in order to be accepted and then relayed to recipient hosts — either internal to your network or to external recipients on the Internet.
These qualifying criteria are defined in listeners; collectively, they define and enforce your mail flow policies. Listeners also define how the appliance communicates with the system that is injecting email.

**Table 3-13 listenerconfig Commands**

<table>
<thead>
<tr>
<th>Name</th>
<th>Unique nickname you supply for the listener, for future reference. The names you define for listeners are case-sensitive. AsyncOS does not allow you to create two identical listener names.</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP Interface</td>
<td>Listeners are assigned to IP interfaces. All IP interfaces must be configured using the <code>systemstartup</code> command or the <code>interfaceconfig</code> command before you create and assign a listener to it.</td>
</tr>
<tr>
<td>Mail protocol</td>
<td>The mail protocol is used for email receiving: either ESMTP or QMQP</td>
</tr>
<tr>
<td>IP Port</td>
<td>The specific IP port used for connections to the listener. By default SMTP uses port 25 and QMQP uses port 628.</td>
</tr>
<tr>
<td>Listener Type</td>
<td>Public listeners are used for most configurations. By convention, private listeners are intended to be used for private (internal) networks, while public listeners contain default characteristics for receiving email from the Internet.</td>
</tr>
<tr>
<td></td>
<td>Blackhole listeners can be used for testing or troubleshooting purposes. When you create a blackhole listener, you choose whether messages are written to disk or not before they are deleted. (See the “Testing and Troubleshooting” chapter of the <code>User Guide for AsyncOS for Cisco Email Security Appliances</code> for more information.)</td>
</tr>
</tbody>
</table>

**Usage**

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command supports a batch format.

**Batch Format - General listenerconfig**

The batch format of the `listenerconfig` command can be used to add and delete listeners on a particular interface. The batch format of the listenerconfig command also allows you to configure a listener’s HAT and RAT.
Chapter 3      The Commands: Reference Examples

SMTP Services Configuration

- Adding a new listener:

  ```bash
  listenerconfig new <name> <public|private|blackhole|blackholequeueing> <interface_name> <smtp|qmqp>
  ```

- Deleting a listener:

  ```bash
  listenerconfig delete <name>
  ```

**Batch Format - HAT**

The following examples demonstrate the use of the batch format of `listenerconfig` to perform various HAT-related tasks. For more information about arguments, consult Table 3-14, “listenerconfig Argument Values - HAT,” on page 254.

- Adding a new sendergroup to the HAT

  ```bash
  listenerconfig edit <name> hostaccess new sendergroup <name> <host_list> <behavior> [options [--comments]]
  ```

- Add a new policy to the HAT

  ```bash
  listenerconfig edit <name> hostaccess new policy <name> <behavior> [options]
  ```

- Add a new host list to a sendergroup

  ```bash
  listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> new <host_list>
  ```

- Delete a host from a sendergroup

  ```bash
  listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> delete <host>
  ```

- Move a host in a sendergroup’s list order

  ```bash
  listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> move <host> <host-to-insert-before>
  ```

- Modify a sendergroup’s policy

  ```bash
  listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> policy <behavior> [options]
  ```

- Print a sendergroup listing

  ```bash
  listenerconfig edit <name> hostaccess edit sendergroup <name> print
  ```
• Rename a sendergroup

```bash
listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> rename <name>
```

• Editing a HAT’s policy

```bash
listenerconfig edit <name> hostaccess edit policy <name> <behavior> [options]
```

• Deleting a sendergroup from a HAT

```bash
listenerconfig edit <name> hostaccess delete sendergroup <name>
```

• Deleting a policy

```bash
listenerconfig edit <name> hostaccess delete policy <name>
```

• Moving a sendergroup’s position in the HAT

```bash
listenerconfig edit <name> hostaccess move <group> <group-to-insert-before>
```

• Changing a HAT default option

```bash
listenerconfig edit <name> hostaccess default [options]
```

• Printing the hostaccess table

```bash
listenerconfig edit <name> hostaccess print
```

• Import a local copy of a HAT

```bash
listenerconfig edit <name> hostaccess import <filename>
```

• Exporting a copy of the HAT from the appliance

```bash
listenerconfig edit <name> hostaccess export <filename>
```

• Deleting all user defined sendergroups and policies from the HAT

```bash
listenerconfig edit <name> hostaccess clear
```
### Table 3-14  \textit{listenerconfig} Argument Values -HAT

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;behavior&gt;</td>
<td>“Accept”, “Relay”, “Reject”, “TCP Refuse”, or “Continue”. When selecting a behavior for use with a sendergroup, additional behaviors of the form “Policy: FOO” are available (where “FOO” is the name of policy).</td>
</tr>
<tr>
<td>&lt;filename&gt;</td>
<td>The filename to use with importing and exporting the hostaccess tables.</td>
</tr>
<tr>
<td>&lt;group&gt;</td>
<td>A sendergroup &lt;name&gt;.</td>
</tr>
<tr>
<td>&lt;host&gt;</td>
<td>A single entity of a &lt;host_list&gt;</td>
</tr>
<tr>
<td>&lt;host_list&gt;</td>
<td>Enter the hosts to add. Hosts can be formatted as follows:</td>
</tr>
<tr>
<td></td>
<td>CIDR addresses (10.1.1.0/24)</td>
</tr>
<tr>
<td></td>
<td>IP address ranges (10.1.1.10-20)</td>
</tr>
<tr>
<td></td>
<td>IP Subnets (10.2.3)</td>
</tr>
<tr>
<td></td>
<td>Hostname (crm.example.com)</td>
</tr>
<tr>
<td></td>
<td>Partial Hostname (.example.com)</td>
</tr>
<tr>
<td></td>
<td>Sender Base Reputation Score range (7.5:10.0)</td>
</tr>
<tr>
<td></td>
<td>Senderbase Network Owner IDS (SBO:12345)</td>
</tr>
<tr>
<td></td>
<td>Remote blacklist queries</td>
</tr>
<tr>
<td></td>
<td>(dnslist[query.blacklist.example])</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>&lt;host_list&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note</td>
</tr>
<tr>
<td>&lt;name&gt;</td>
</tr>
</tbody>
</table>
### Table 3-14 listenerconfig Argument Values -HAT

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--max_size</td>
<td>Maximum message size. Add a trailing k for kilobytes, M for megabytes, or no letters for bytes.</td>
</tr>
<tr>
<td>--max_conn</td>
<td>Maximum number of connections allowed from a single host.</td>
</tr>
<tr>
<td>--max_msgs</td>
<td>Maximum number of messages per connection.</td>
</tr>
<tr>
<td>--max_rcpt</td>
<td>Maximum number of recipients per message.</td>
</tr>
<tr>
<td>--override</td>
<td>Override the hostname in the SMTP banner. “No” or SMTP banner string.</td>
</tr>
<tr>
<td>--cust_acc</td>
<td>Specify a custom SMTP acceptance response. “No” or SMTP acceptance response string.</td>
</tr>
<tr>
<td>--acc_code</td>
<td>Custom SMTP acceptance response code. Default is 220.</td>
</tr>
<tr>
<td>--cust_rej</td>
<td>Specify a custom SMTP rejection response. “No” or SMTP rejection response string.</td>
</tr>
<tr>
<td>--rej_code</td>
<td>Custom SMTP rejection response code. Default is 554.</td>
</tr>
<tr>
<td>--rate_lim</td>
<td>Enable rate limiting per host. “No”, “default” or maximum number of recipients per hour per host.</td>
</tr>
<tr>
<td>--cust_lim</td>
<td>Specify a custom SMTP limit exceeded response message. “No” or SMTP rejection response string. Default is “No”.</td>
</tr>
<tr>
<td>--lim_code</td>
<td>Custom SMTP limit exceeded response code. Default is 452.</td>
</tr>
<tr>
<td>--use_sb</td>
<td>Use SenderBase for flow control by default. “Yes”, “No”, or “default”.</td>
</tr>
<tr>
<td>--as_scan</td>
<td>Enable anti-spam scanning. “Yes”, “No”, “Default”.</td>
</tr>
<tr>
<td>--av_scan</td>
<td>Enable anti-virus scanning. “Yes”, “No”, “Default”.</td>
</tr>
<tr>
<td>--dhap</td>
<td>Directory Harvest Attack Prevention. “No”, “default”, or maximum number of invalid recipients per hour from a remote host.</td>
</tr>
<tr>
<td>--tls</td>
<td>Not supported; use menuing system to configure TLS.</td>
</tr>
<tr>
<td>--sig_bits</td>
<td>Number of bits of IP address to treat as significant. From 0 to 32, “No” or “default”.</td>
</tr>
<tr>
<td>--dkim_verification</td>
<td>Enable DKIM verification. “Yes”, “No”, “Default.”</td>
</tr>
<tr>
<td>--dkim_verification_profile &lt;name&gt;</td>
<td>The name of DKIM verification profile. This option is only applicable if --dkim_verification value is set to “Yes.”</td>
</tr>
</tbody>
</table>
**Batch Format - RAT**

The following examples demonstrate the use of the batch format of `listenerconfig` to perform various RAT-related tasks. For more information about arguments, consult Table 3-15, “`listenerconfig Argument Values - RAT`,” on page 257

- Adding a new recipient to the RAT

  ```
  listenerconfig edit <name> rcptaccess new <rat_addr> [options]
  ```

- Editing a recipient in the RAT

  ```
  listenerconfig edit <name> rcptaccess edit <rat_addr> [options]
  ```

- Deleting a recipient from the RAT

  ```
  listenerconfig edit <name> rcptaccess delete <rat_addr>
  ```

- Printing a copy of the RAT

  ```
  listenerconfig edit <name> rcptaccess print
  ```

- Importing a local RAT to your appliance

  ```
  listenerconfig edit <name> rcptaccess import <filename>
  ```

<table>
<thead>
<tr>
<th><strong>Table 3-14</strong></th>
<th><strong><code>listenerconfig Argument Values - RAT</code></strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>--spf</td>
<td>Enable SPF verification. “Yes”, “No”, “Default.”</td>
</tr>
<tr>
<td>--spf_conf_level</td>
<td>SPF conformance level. Used with “--spf Yes” only. “spf_only”, “sidf_compatible”, “sidf_strict.”</td>
</tr>
<tr>
<td>--spf_downgrade_pra</td>
<td>Downgrade SPF PRA verification result. Used with “--spf Yes” and “--spf_conf_level sidf_compatible” only. “Yes”, “No.”</td>
</tr>
</tbody>
</table>
| --spf_helo_test | SPF HELO test. Used with “--spf Yes” and “--spf_conf_level sidf_compatible,” or “--spf_conf_level spf_only.” “Yes”, “No”.
| --dmarc_verification | Enable DMARC verification. “Yes”, “No”, “Default.” |
| --dmarc_verification_profile <name> | The name of DMARC verification profile. This option is only applicable if --dmarc_verification value is set to “Yes.” |
| --dmarc_agg_reports | Enable DMARC aggregate reports. “Yes”, “No”, “Default.” This option is only applicable if --dmarc_verification value is set to “Yes.” |
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SMTP Services Configuration

- Exporting a RAT

\[\text{listenerconfig edit <name> rcptaccess export <filename>}\]

- Clearing the default access

\[\text{listenerconfig edit <name> rcptaccess clear <default_access>}\]

Table 3-15  \textit{listenerconfig Argument Values - RAT}

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;rat_addr&gt;</td>
<td>Enter the hosts to add. Hosts can be formatted as follows:</td>
</tr>
<tr>
<td></td>
<td>CIDR addresses (10.1.1.0/24)</td>
</tr>
<tr>
<td></td>
<td>Hostname (crm.example.com)</td>
</tr>
<tr>
<td></td>
<td>Partial Hostname (.example.com)</td>
</tr>
<tr>
<td></td>
<td>Usernames (postmaster@)</td>
</tr>
<tr>
<td></td>
<td>Full email addresses (<a href="mailto:joe@example.com">joe@example.com</a>, joe@[1.2.3.4])</td>
</tr>
<tr>
<td></td>
<td>\textbf{Note} \quad Separate multiple hosts with commas</td>
</tr>
</tbody>
</table>

\begin{tabular}{|c|c|} \hline
<options> & \textit{--action} Action to apply to address(es). Either “Accept” or \textbf{“Reject”}. Default is “Accept”. \\
& \textit{--cust_resp} Specify a custom SMTP response. “No” or SMTP acceptance response string. \\
& \textit{--resp_code} Custom SMTP response code. Default is 250 for “Accept” actions, 550 for “Reject”. \\
& \textit{--bypass_rc} Bypass receiving control. Default is “No”. \\
& \textit{--bypass_la} Bypass LDAP Accept query. Either “Yes” or “No.” \\
\hline
\end{tabular}

Example - Adding a listener

In the following example, the \textit{listenerconfig} command is used to create a new private listener called OutboundMail that can be used for the B listener needed in the Enterprise Gateway configuration. (Note: you also had the option to add this private listener during the GUI’s System Setup Wizard CLI systemsetup command.)

A private listener type is chosen and named OutboundMail. It is specified to run on the PrivateNet IP interface, using the SMTP protocol over port 25. The default values for the Host Access Policy for this listener are then accepted.

\texttt{mail3.example.com}: \texttt{listenerconfig}

\texttt{Currently configured listeners:}

1. InboundMail (on PublicNet, 192.168.2.1) SMTP TCP Port 25 Public

Choose the operation you want to perform:
- NEW - Create a new listener.
CLI Reference Guide for AsyncOS 9.8 for Cisco Email Security Appliances

SMTP Services Configuration

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- EDIT - Modify a listener.
- DELETE - Remove a listener.
- SETUP - Change global settings.

[/] > new

Please select the type of listener you want to create.
1. Private
2. Public
3. Blackhole

[2] > 1

Please create a name for this listener (Ex: "OutboundMail"): [/] > OutboundMail

Please choose an IP interface for this Listener.
1. Management (192.168.42.42/24: mail3.example.com)
2. PrivateNet (192.168.1.1/24: mail3.example.com)
3. PublicNet (192.168.2.1/24: mail3.example.com)

[1] > 2

Choose a protocol.
1. SMTP
2. QMQP

[1] > 1

Please enter the TCP port for this listener.
[25] > 25

Please specify the systems allowed to relay email through the IronPort C60.
Hostnames such as "example.com" are allowed.
Partial hostnames such as ".example.com" are allowed.
IP addresses, IP address ranges, and partial IP addresses are allowed.
Separate multiple entries with commas.

[/] > .example.com

Do you want to enable rate limiting for this listener? (Rate limiting defines the maximum number of recipients per hour you are willing to receive from a remote domain.) [N] > n

Default Policy Parameters
========================
Maximum Message Size: 100M
Maximum Number Of Connections From A Single IP: 600
Maximum Number Of Messages Per Connection: 10,000
Maximum Number Of Recipients Per Message: 100,000
Maximum Number Of Recipients Per Hour: Disabled
Use SenderBase for Flow Control: No
Spam Detection Enabled: No
Virus Detection Enabled: Yes
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
Would you like to change the default host access policy? [N] > n

Listener OutboundMail created.
Defaults have been set for a Private listener.
Use the listenerconfig->EDIT command to customize the listener.

Currently configured listeners:
1. InboundMail (on PublicNet, 192.168.2.1) SMTP TCP Port 25 Public
2. OutboundMail (on PrivateNet, 192.168.1.1) SMTP TCP Port 25 Private

Choose the operation you want to perform:
- NEW - Create a new listener.
- EDIT - Modify a listener.
Example - Customizing the Host Acess Table (HAT) for a listener via Export and Import

Many of the subcommands within the `listenerconfig` command allow you to import and export data in order to make large configuration changes without having to enter data piecemeal in the CLI. These steps use the CLI to modify the Host Access Table (HAT) of a listener by exporting, modifying, and importing a file. You can also use the HAT CLI editor or the GUI to customize the HAT for a listener. For more information, see the “Configuring the Gateway to Receive Mail” and “Using Mail Flow Monitor” chapters in the *User Guide for AsyncOS for Cisco Email Security Appliances*.

To customize a HAT for a listener you have defined via export and import:

Step 1

Use the `hostaccess -> export` subcommands of `listenerconfig` to export the default HAT to a file. In the following example, the HAT for the public listener InboundMail is printed, and then exported to a file named `inbound.HAT.txt`.

```
mail3.example.com> listenerconfig
```

Currently configured listeners:
1. InboundMail (on PublicNet, 192.168.2.1) SMTP TCP Port 25 Public
2. OutboundMail (on PrivateNet, 192.168.1.1) SMTP TCP Port 25 Private

Choose the operation you want to perform:
- NEW - Create a new listener.
- EDIT - Modify a listener.
- DELETE - Remove a listener.
- SETUP - Change global settings.

```
mail3.example.com> edit
```

Enter the name or number of the listener you wish to edit.
```
[1]> 1
```
Name: InboundMail
Type: Public
Interface: PublicNet (192.168.2.1/24) TCP Port 25
Protocol: SMTP
Default Domain:
Max Concurrency: 1000 (TCP Queue: 50)
Domain map: disabled
TLS: No
SMTP Authentication: Disabled
Bounce Profile: Default
Use SenderBase For Reputation Filters and IP Profiling: Yes
Footer: None
LDAP: off

Choose the operation you want to perform:
- NAME - Change the name of the listener.
- INTERFACE - Change the interface.
- LIMITS - Change the injection limits.
- SETUP - Configure general options.
- HOSTACCESS - Modify the Host Access Table.
- RCPTACCESS - Modify the Recipient Access Table.
- BOUNCECONFIG - Choose the bounce profile to use for messages injected on this listener.
- MASQUERADE - Configure the Domain Masquerading Table.

```
[1]> hostaccess -> export
```

...
- DOMAINMAP - Configure domain mappings.

[>] hostaccess

Default Policy Parameters

=========================
Maximum Message Size: 10M
Maximum Number Of Concurrent Connections From A Single IP: 10
Maximum Number Of Messages Per Connection: 10
Maximum Number Of Recipients Per Message: 50
Directory Harvest Attack Prevention: Enabled
Maximum Number Of Invalid Recipients Per Hour: 25
Maximum Number Of Recipients Per Hour: Disabled
Use SenderBase for Flow Control: Yes
Spam Detection Enabled: Yes
Virus Detection Enabled: Yes
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
DKIM/DomainKeys Signing Enabled: No
DKIM Verification Enabled: No
SPF/SIDF Verification Enabled: No
DMARC Verification Enabled: No
Envelope Sender DNS Verification Enabled: No
Domain Exception Table Enabled: No
Accept untagged bounces: No

There are currently 4 policies defined.
There are currently 5 sender groups.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
- IMPORT - Import a table from a file.
- EXPORT - Export the table to a file.
- CLEAR - Remove all entries.

[>] print

$BLOCKED
- REJECT {}

$TRUSTED
- ACCEPT {
  tls = "off"
  dhap_limit = 0
  max_rcpts_per_hour = -1
  virus_check = "on"
  maxmsgs_per_session = 5000
  spam_check = "off"
  use_sb = "off"
  max_message_size = 104857600
  maxrcpts_per_msg = 5000
  max_concurrency = 600
}

$ACCEPTED
- ACCEPT {}

$THROTTLED
- ACCEPT {
  tls = "off"
  dhap_limit = 0
  max_rcpts_per_hour = 1
  virus_check = "on"
max_msgs_per_session = 10
spam_check = "on"
use_sb = "on"
max_message_size = 1048576
max_rcpts_per_msg = 25
max_concurrency = 10
}

WHITELIST:
 $TRUSTED (My trusted senders have no anti-spam or rate limiting)

BLACKLIST:
 $BLOCKED (Spammers are rejected)

SUSPECTLIST:
 $THROTTLED (Suspicious senders are throttled)

UNKNOWNLIST:
 $ACCEPTED (Reviewed but undecided, continue normal acceptance)

ALL
 $ACCEPTED (Everyone else)

Default Policy Parameters
---------------------------
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
Maximum Concurrency Per IP: 1,000
Maximum Message Size: 100M
Maximum Messages Per Connection: 1,000
Maximum Recipients Per Message: 1,000
Maximum Recipients Per Hour: Disabled
Use SenderBase For Flow Control: Yes
Spam Detection Enabled: Yes
Virus Detection Enabled: Yes

There are currently 4 policies defined.
There are currently 5 sender groups.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
- IMPORT - Import a table from a file.
- EXPORT - Export the table to a file.
- CLEAR - Remove all entries.

[]> export

Enter a name for the exported file:
[]> inbound.HAT.txt

File written on machine "mail3.example.com".

Step 2  Outside of the Command Line Interface (CLI), get the file inbound.HAT.txt.
Step 3  With a text editor, create new HAT entries in the file.
In this example, the following entries are added to the HAT above the ALL entry:

```
spamdomain.com    REJECT
   .spamdomain.com REJECT
   251.192.1.   TCPREFUSE
   169.254.10.10 RELAY
```

- The first two entries reject all connections from the remote hosts in the domain `spamdomain.com` and any subdomain of `spamdomain.com`.
- The third line refuses connections from any host with an IP address of `251.192.1.x`.
- The fourth line allows the remote host with the IP address of `169.254.10.10` to use the Email Security appliance as an SMTP relay for all of its outbound email to the Internet.

**Note**

The order that rules appear in the HAT is important. The HAT is read from top to bottom for each host that attempts to connect to the listener. If a rule matches a connecting host, the action is taken for that connection immediately. You should place all custom entries in the HAT above an ALL host definition. You can also use the HAT CLI editor or the GUI to customize the HAT for a listener. For more information, see the “Configuring the Gateway to Receive Mail” and “Using Mail Flow Monitor” chapters in the *User Guide for AsyncOS for Cisco Email Security Appliances*.

**Step 4**

Save the file and place it in the configuration directory for the interface so that it can be imported. (See Appendix B, “Accessing the Appliance,” for more information.)

**Step 5**

Use the `hostaccess -> import` subcommand of `listenerconfig` to import the edited Host Access Table file.

In the following example, the edited file named `inbound.HAT.txt` is imported into the HAT for the InboundMail listener. The new entries are printed using the `print` subcommand.

```
mail3.example.com> listenerconfig
Currently configured listeners:
  1. InboundMail (on PublicNet, 192.168.2.1) SMTP TCP Port 25 Public
  2. OutboundMail (on PrivateNet, 192.168.1.1) SMTP TCP Port 25 Private

Choose the operation you want to perform:
  - NEW  - Create a new listener.
  - EDIT - Modify a listener.
  - DELETE - Remove a listener.
  - SETUP - Change global settings.
[?] > edit

Enter the name or number of the listener you wish to edit.
[?] > 1

Name: InboundMail
Type: Public
Interface: PublicNet (192.168.2.1/24) TCP Port 25
Protocol: SMTP
Default Domain:
Max Concurrency: 1000 (TCP Queue: 50)
Domain Map: Disabled
TLS: No
SMTP Authentication: Disabled
```
Bounce Profile: Default
Use SenderBase For Reputation Filters and IP Profiling: Yes
Footer: None
LDAP: Off

Choose the operation you want to perform:
- NAME - Change the name of the listener.
- INTERFACE - Change the interface.
- LIMITS - Change the injection limits.
- SETUP - Configure general options.
- HOSTACCESS - Modify the Host Access Table.
- RCPTACCESS - Modify the Recipient Access Table.
- BOUNCECONFIG - Choose the bounce profile to use for messages injected on this listener.
- MASQUERADE - Configure the Domain Masquerading Table.
- DOMAINMAP - Configure domain mappings.

Default Policy Parameters
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
Maximum Concurrency Per IP: 1,000
Maximum Message Size: 100M
Maximum Messages Per Connection: 1,000
Maximum Recipients Per Message: 1,000
Maximum Recipients Per Hour: Disabled
Use SenderBase For Flow Control: Yes
Spam Detection Enabled: Yes
Virus Detection Enabled: Yes

There are currently 4 policies defined.
There are currently 5 sender groups.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
- IMPORT - Import a table from a file.
- EXPORT - Export the table to a file.
- CLEAR - Remove all entries.

Enter the name of the file to import:

9 entries imported successfully.

Default Policy Parameters
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
Maximum Concurrency Per IP: 1,000
Maximum Message Size: 100M
Maximum Messages Per Connection: 1,000
Maximum Recipients Per Message: 1,000
Maximum Recipients Per Hour: Disabled
Use SenderBase For Flow Control: Yes
Spam Detection Enabled: Yes
Virus Detection Enabled: Yes
There are currently 4 policies defined. There are currently 5 sender groups.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
- IMPORT - Import a table from a file.
- EXPORT - Export the table to a file.
- CLEAR - Remove all entries.


default accept

$ACCEPTED
ACCEPT

$THROTTLED
ACCEPT {
  spam_check = "on"
  max_msgs_per_session = 10
  max_concurrency = 10
  max_rcpts_per_msg = 25
  max_rcpts_per_hour = 1
  dhap_limit = 0
  virus_check = "on"
  max_message_size = 1048576
  use_sb = "on"
  tls = "off"
}

$TRUSTED
ACCEPT {
  spam_check = "off"
  max_msgs_per_session = 5000
  max_concurrency = 600
  max_rcpts_per_msg = 5000
  max_rcpts_per_hour = -1
  dhap_limit = 0
  virus_check = "on"
  max_message_size = 104857600
  use_sb = "off"
  tls = "off"
}

$BLOCKED
REJECT

WHITELIST:
  $TRUSTED (My trusted senders have no anti-spam scanning or rate limiting)

BLACKLIST:
  $BLOCKED (Spammers are rejected)

SUSPECTLIST:
  $THROTTLED (Suspicious senders are throttled)

UNKNOWNLIST:
  $ACCEPTED (Reviewed but undecided, continue normal acceptance)

spamdomain.com
  REJECT (reject the domain "spamdomain.com")

.spamdomain.com
  REJECT (reject all subdomains of ".spamdomain.com")
251.192.1.
   TCPREFUSE (TCPREFUSE the IP addresses in "251.192.1")

169.254.10.10
   RELAY (RELAY the address 169.254.10.10)

ALL
   $ACCEPTED (Everyone else)

Default Policy Parameters
==========================
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
Maximum Concurrency Per IP: 1,000
Maximum Message Size: 100M
Maximum Messages Per Connection: 1,000
Maximum Recipients Per Message: 1,000
Maximum Recipients Per Hour: Disabled
Use SenderBase For Flow Control: Yes
Spam Detection Enabled: Yes
Virus Detection Enabled: Yes

There are currently 4 policies defined.
There are currently 5 sender groups.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
- IMPORT - Import a table from a file.
- EXPORT - Export the table to a file.
- CLEAR - Remove all entries.

Remember to issue the commit command after you import so that the configuration change takes effect.

Example - Enabling Public Key Harvesting and S/MIME Decryption and Verification

The following example shows how to:
- Retrieve (harvest) public key from the incoming S/MIME signed messages
- Enable S/MIME decryption and verification

mail.example.com> listenerconfig

Currently configured listeners:
1. MyListener (on Management, 172.29.181.70) SMTP TCP Port 25 Public

Choose the operation you want to perform:
- NEW - Create a new listener.
- EDIT - Modify a listener.
- DELETE - Remove a listener.
- SETUP - Change global settings.

[ ]> edit
Enter the name or number of the listener you wish to edit.
[]> 1

Name: MyListener
Type: Public
Interface: Management (172.29.181.70/24) TCP Port 25
Protocol: SMTP
Default Domain: <none configured>
Max Concurrent Connections: 50 (TCP Queue: 50)
Domain Map: Disabled
TLS: No
SMTP Authentication: Disabled
Bounce Profile: Default
Use SenderBase For Reputation Filters and IP Profiling: Yes
Footer: None
Heading: None
SMTP Call-Ahead: Disabled
LDAP: Off

Choose the operation you want to perform:
- NAME - Change the name of the listener.
- INTERFACE - Change the interface.
- CERTIFICATE - Choose the certificate.
- LIMITS - Change the injection limits.
- SETUP - Configure general options.
- HOSTACCESS - Modify the Host Access Table.
- RCPTACCESS - Modify the Recipient Access Table.
- BOUNCECONFIG - Choose the bounce profile to use for messages injected on this listener.
- MASQUERADE - Configure the Domain Masquerading Table.
- DOMAINMAP - Configure domain mappings.
[]> hostaccess

Default Policy Parameters
==========================
Maximum Message Size: 10M
Maximum Number Of Concurrent Connections From A Single IP: 10
Maximum Number Of Messages Per Connection: 10
Maximum Number Of Recipients Per Message: 50
Directory Harvest Attack Prevention: Enabled
Maximum Number Of Invalid Recipients Per Hour: 25
Maximum Number Of Recipients Per Hour: Disabled
Maximum Number of Recipients per Envelope Sender: Disabled
Use SenderBase for Flow Control: Yes
Spam Detection Enabled: Yes
Virus Detection Enabled: Yes
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
DKIM/DomainKeys Signing Enabled: No
DKIM Verification Enabled: No
S/MIME Public Key Harvesting Enabled: No
S/MIME Decryption/Verification Enabled: No
SPF/SIDF Verification Enabled: No
DMARC Verification Enabled: No
Envelope Sender DNS Verification Enabled: No
Domain Exception Table Enabled: No
Accept untagged bounces: No

There are currently 4 policies defined.
There are currently 5 sender groups.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
- IMPORT - Import a table from a file.
- EXPORT - Export the table to a file.
- RESET - Remove senders and set policies to system default.

[]> default

Enter the default maximum message size. Add a trailing k for kilobytes, M for megabytes, or no letter for b
[10M]>

Enter the maximum number of concurrent connections allowed from a single IP address.
[10]>

Enter the maximum number of messages per connection.
[10]>

Enter the maximum number of recipients per message.
[50]>

Do you want to override the hostname in the SMTP banner?  [N]>

Would you like to specify a custom SMTP acceptance response?  [N]>

Would you like to specify a custom SMTP rejection response?  [N]>

Do you want to enable rate limiting per host?  [N]>

Do you want to enable rate limiting per envelope sender?  [N]>

Do you want to enable Directory Harvest Attack Prevention per host?  [Y]>

Enter the maximum number of invalid recipients per hour from a remote host.
[25]>

Select an action to apply when a recipient is rejected due to DHAP:
1. Drop
2. Code
[1]>

Would you like to specify a custom SMTP DHAP response?  [Y]>

Enter the SMTP code to use in the response. 550 is the standard code.
[550]>

Enter your custom SMTP response. Press Enter on a blank line to finish.
custom_response

Would you like to use SenderBase for flow control by default?  [Y]>

Would you like to enable anti-spam scanning?  [Y]>

Would you like to enable anti-virus scanning?  [Y]>

Do you want to allow encrypted TLS connections?
1. No
2. Preferred
3. Required
4. Preferred - Verify
5. Required - Verify
[1]>
Would you like to enable DKIM/DomainKeys signing? [N]>

Would you like to enable DKIM verification? [N]>

Would you like to enable S/MIME Public Key Harvesting? [N] > y

Would you like to harvest certificate on verification failure? [N]>

Would you like to harvest updated certificate? [Y]>

Would you like to enable S/MIME gateway decryption/verification? [N] > y

Select the appropriate operation for the S/MIME signature processing:
1. Preserve
2. Remove
[1]>

Would you like to change SPF/SIDF settings? [N]>

Would you like to enable DMARC verification? [N]>

Would you like to enable envelope sender verification? [N]>

Would you like to enable use of the domain exception table? [N]>

Do you wish to accept untagged bounces? [N]>

Default Policy Parameters
============================
Maximum Message Size: 10M
Maximum Number Of Concurrent Connections From A Single IP: 10
Maximum Number Of Messages Per Connection: 10
Maximum Number Of Recipients Per Message: 50
Directory Harvest Attack Prevention: Enabled
Maximum Number Of Invalid Recipients Per Hour: 25
Maximum Number Of Recipients Per Hour: Disabled
Maximum Number Of Recipients per Envelope Sender: Disabled
Use SenderBase for Flow Control: Yes
Spam Detection Enabled: Yes
Virus Detection Enabled: Yes
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
DKIM/DomainKeys Signing Enabled: No
DKIM Verification Enabled: No
S/MIME Public Key Harvesting Enabled: Yes
S/MIME Decryption/Verification Enabled: Yes
SPF/SIDF Verification Enabled: No
DMARC Verification Enabled: No
Envelope Sender DNS Verification Enabled: No
Domain Exception Table Enabled: No
Accept untagged bounces: No

There are currently 4 policies defined.
There are currently 5 sender groups.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
### Example - Advanced HAT Parameters

Table 3-16 defines the syntax of advanced HAT parameters. Note that for the values below which are numbers, you can add a trailing \( k \) to denote kilobytes or a trailing \( M \) to denote megabytes. Values with no letters are considered bytes. Parameters marked with an asterisk support the variable syntax shown in Table 3-16.

**Table 3-16 Advanced HAT Parameter Syntax**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Syntax</th>
<th>Values</th>
<th>Example Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum messages per connection</td>
<td>max_msgs_per_session</td>
<td>Number</td>
<td>1000</td>
</tr>
<tr>
<td>Maximum recipients per message</td>
<td>max_rcpts_per_msg</td>
<td>Number</td>
<td>10000 1k</td>
</tr>
<tr>
<td>Maximum message size</td>
<td>max_message_size</td>
<td>Number</td>
<td>1048576 20M</td>
</tr>
<tr>
<td>Maximum concurrent connections allowed to this listener</td>
<td>max_concurrency</td>
<td>Number</td>
<td>1000</td>
</tr>
<tr>
<td>SMTP Banner Code</td>
<td>smtp_banner_code</td>
<td>Number</td>
<td>220</td>
</tr>
<tr>
<td>SMTP Banner Text (*)</td>
<td>smtp_banner_text</td>
<td>String</td>
<td>Accepted</td>
</tr>
<tr>
<td>SMTP Reject Banner Code</td>
<td>smtp_banner_code</td>
<td>Number</td>
<td>550</td>
</tr>
<tr>
<td>SMTP Reject Banner Text (*)</td>
<td>smtp_banner_text</td>
<td>String</td>
<td>Rejected</td>
</tr>
<tr>
<td>Override SMTP Banner Hostname</td>
<td>use_override_hostname</td>
<td>on</td>
<td>off</td>
</tr>
<tr>
<td></td>
<td>override_hostname</td>
<td>String</td>
<td>newhostname</td>
</tr>
<tr>
<td>Use TLS</td>
<td>tls</td>
<td>on</td>
<td>off</td>
</tr>
<tr>
<td>Use anti-spam scanning</td>
<td>spam_check</td>
<td>on</td>
<td>off</td>
</tr>
<tr>
<td>Use Sophos virus scanning</td>
<td>virus_check</td>
<td>on</td>
<td>off</td>
</tr>
<tr>
<td>Maximum Recipients per Hour</td>
<td>max_rcpts_per_hour</td>
<td>Number</td>
<td>5k</td>
</tr>
<tr>
<td>Maximum Recipients per Hour Error Code</td>
<td>max_rcpts_per_hour_code</td>
<td>Number</td>
<td>452</td>
</tr>
<tr>
<td>Maximum Recipients per Hour Text (*)</td>
<td>max_rcpts_per_hour_text</td>
<td>String</td>
<td>Too many recipients</td>
</tr>
<tr>
<td>Use SenderBase</td>
<td>use_sb</td>
<td>on</td>
<td>off</td>
</tr>
</tbody>
</table>
Example - Configuring SPF and SIDF

When configuring the default settings for a listener’s Host Access Table, you can choose the listener’s SPF/SIDF conformance level and the SMTP actions (ACCEPT or REJECT) that the appliance performs, based on the SPF/SIDF verification results. You can also define the SMTP response that the appliance sends when it rejects a message.

Depending on the conformance level, the appliance performs a check against the HELO identity, MAIL FROM identity, or PRA identity. You can specify whether the appliance proceeds with the session (ACCEPT) or terminates the session (REJECT) for each of the following SPF/SIDF verification results for each identity check:

- **None.** No verification can be performed due to the lack of information.
- **Neutral.** The domain owner does not assert whether the client is authorized to use the given identity.
- **SoftFail.** The domain owner believes the host is not authorized to use the given identity but is not willing to make a definitive statement.
- **Fail.** The client is not authorized to send mail with the given identity.
- **TempError.** A transient error occurred during verification.
- **PermError.** A permanent error occurred during verification.

The appliance accepts the message for a Pass result unless you configure the SIDF Compatible conformance level to downgrade a Pass result of the PRA identity to None if there are Resent-Sender: or Resent-From: headers present in the message. The appliance then takes the SMTP action specified for when the PRA check returns None.

If you choose not to define the SMTP actions for an identity check, the appliance automatically accepts all verification results, including Fail.

The appliance terminates the session if the identity verification result matches a REJECT action for any of the enabled identity checks. For example, an administrator configures a listener to accept messages based on all HELO identity check results, including Fail, but also configures it to reject messages for a Fail result from the MAIL FROM identity check. If a message fails the HELO identity check, the session proceeds because the appliance accepts that result. If the message then fails the MAIL FROM identity check, the listener terminates the session and then returns the SMTP response for the REJECT action.

The SMTP response is a code number and message that the appliance returns when it rejects a message based on the SPF/SIDF verification result. The TempError result returns a different SMTP response from the other verification results. For TempError, the default response code is 451 and the default message text is 

#4.4.3 Temporary error occurred during SPF verification. For all other verification results, the default response code is 550 and the default message text is 

#5.7.1 SPF unauthorized mail is prohibited. You can specify your own response code and message text for TempError and the other verification results.
Optionally, you can configure the appliance to return a third-party response from the SPF publisher domain if the REJECT action is taken for Neutral, SoftFail, or Fail verification result. By default, the appliance returns the following response:

```
550-#5.7.1 SPF unauthorized mail is prohibited.
550-The domain example.com explains:
550 <Response text from SPF domain publisher>
```

To enable these SPF/SIDF settings, use the `listenerconfig -> edit` subcommand and select a listener. Then use the `hostaccess -> default` subcommand to edit the Host Access Table’s default settings. Answer yes to the following prompts to configure the SPF controls:

Would you like to change SPF/SIDF settings? [N]> yes

Would you like to perform SPF/SIDF Verification? [Y]> yes

The following SPF control settings are available for the Host Access Table:

<table>
<thead>
<tr>
<th>Table 3-17 SPF Control Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conformance Level</strong></td>
</tr>
<tr>
<td>SPF Only</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Table 3-17  SPF Control Settings

<table>
<thead>
<tr>
<th>Conformance Level</th>
<th>Available SPF Control Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIDF Compatible</td>
<td>• whether to perform a HELO identity check</td>
</tr>
<tr>
<td></td>
<td>• whether the verification downgrades a Pass result of the PRA identity to None if the Resent-Sender: or Resent-From: headers are present in the message</td>
</tr>
<tr>
<td></td>
<td>• SMTP actions taken based on the results of the following identity checks:</td>
</tr>
<tr>
<td></td>
<td>• HELO identity (if enabled)</td>
</tr>
<tr>
<td></td>
<td>• MAIL FROM Identity</td>
</tr>
<tr>
<td></td>
<td>• PRA Identity</td>
</tr>
<tr>
<td></td>
<td>• SMTP response code and text returned for the REJECT action</td>
</tr>
<tr>
<td></td>
<td>• verification timeout (in seconds)</td>
</tr>
<tr>
<td>SIDF Strict</td>
<td>• SMTP actions taken based on the results of the following identity checks:</td>
</tr>
<tr>
<td></td>
<td>• MAIL FROM Identity</td>
</tr>
<tr>
<td></td>
<td>• PRA Identity</td>
</tr>
<tr>
<td></td>
<td>• SMTP response code and text returned in case of SPF REJECT action</td>
</tr>
<tr>
<td></td>
<td>• verification timeout (in seconds)</td>
</tr>
</tbody>
</table>

The following example shows a user configuring the SPF/SIDF verification using the SPF Only conformance level. The appliance performs the HELO identity check and accepts the None and Neutral verification results and rejects the others. The CLI prompts for the SMTP actions are the same for all identity types. The user does not define the SMTP actions for the MAIL FROM identity. The appliance automatically accepts all verification results for the identity. The appliance uses the default reject code and text for all REJECT results.

Example: SPF/SIDF Settings

Would you like to change SPF/SIDF settings?  [N]> yes

Would you like to perform SPF/SIDF Verification?  [N]> yes

What Conformance Level would you like to use?
1. SPF only
2. SIDF compatible
3. SIDF strict
[2]> 1

Would you like to have the HELO check performed?  [Y]> y

Would you like to change SMTP actions taken as result of the SPF verification?  [N]> y

Would you like to change SMTP actions taken for the HELO identity?  [N]> y
What SMTP action should be taken if HELO check returns None?
1. Accept
2. Reject

What SMTP action should be taken if HELO check returns Neutral?
1. Accept
2. Reject

What SMTP action should be taken if HELO check returns SoftFail?
1. Accept
2. Reject

What SMTP action should be taken if HELO check returns Fail?
1. Accept
2. Reject

What SMTP action should be taken if HELO check returns TempError?
1. Accept
2. Reject

What SMTP action should be taken if HELO check returns PermError?
1. Accept
2. Reject

Would you like to change SMTP actions taken for the MAIL FROM identity? [N]> n

Would you like to change SMTP response settings for the REJECT action? [N]> n

Verification timeout (seconds) [40]> 40

The following shows how the SPF/SIDF settings are displayed for the listener’s Default Policy Parameters.

Example: SPF/SIDF in Default Policy Parameters

SPF/SIDF Verification Enabled: Yes
Conformance Level: SPF only
Do HELO test: Yes
SMTP actions:
  For HELO Identity:
    None, Neutral: Accept
    SoftFail, Fail, TempError, PermError: Reject
  For MAIL FROM Identity: Accept
SMTP Response Settings:
  Reject code: 550
  Reject text: #5.7.1 SPF unauthorized mail is prohibited.
  Get reject response text from publisher: Yes
  Defer code: 451
  Defer text: #4.4.3 Temporary error occurred during SPF verification.
Verification timeout: 40
Example - Enable DMARC Verification

The following example shows how to enable DMARC verification.

```
mail.example.com> listenerconfig
```

Currently configured listeners:
1. Listener 1 (on Management, 172.29.181.70) SMTP TCP Port 25 Public

Choose the operation you want to perform:
- NEW - Create a new listener.
- EDIT - Modify a listener.
- DELETE - Remove a listener.
- SETUP - Change global settings.

[]> edit

Enter the name or number of the listener you wish to edit.
[]> 1

Name: Listener 1
Type: Public
Interface: Management (172.29.181.70/24) TCP Port 25
Protocol: SMTP
Default Domain: <none configured>
Max Concurrent Connections: 300 (TCP Queue: 50)
Domain Map: Disabled
TLS: No
SMTP Authentication: Disabled
Bounce Profile: Default
Use SenderBase For Reputation Filters and IP Profiling: Yes
Footer: None
Heading: None
SMTP Call-Ahead: Disabled
LDAP: Off

Choose the operation you want to perform:
- NAME - Change the name of the listener.
- INTERFACE - Change the interface.
- CERTIFICATE - Choose the certificate.
- LIMITS - Change the injection limits.
- SETUP - Configure general options.
- HOSTACCESS - Modify the Host Access Table.
- RCPTACCESS - Modify the Recipient Access Table.
- BOUNCECONFIG - Choose the bounce profile to use for messages injected on this listener.
- MASQUERADE - Configure the Domain Masquerading Table.
- DOMAINMAP - Configure domain mappings.

[]> hostaccess

Default Policy Parameters
----------------------------------
Maximum Message Size: 20M
Maximum Number Of Concurrent Connections From A Single IP: 10
Maximum Number Of Messages Per Connection: 10
Maximum Number Of Recipients Per Message: 50
Directory Harvest Attack Prevention: Enabled
Maximum Number Of Invalid Recipients Per Hour: 25
Maximum Number Of Recipients Per Hour: Disabled
Maximum Number of Recipients per Envelope Sender: Disabled
Use SenderBase for Flow Control: Yes
Spam Detection Enabled: Yes
Virus Detection Enabled: Yes
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
DKIM/DomainKeys Signing Enabled: No
DKIM Verification Enabled: No
SPF/SIDF Verification Enabled: No
DMARC Verification Enabled: No
Envelope Sender DNS Verification Enabled: No
Domain Exception Table Enabled: No
Accept untagged bounces: No

There are currently 4 policies defined.
There are currently 5 sender groups.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
- IMPORT - Import a table from a file.
- EXPORT - Export the table to a file.
- RESET - Remove senders and set policies to system default.

\[>\] default

Enter the default maximum message size. Add a trailing k for kilobytes, M for megabytes, or no letter for bytes.

\[20M\]>

Enter the maximum number of concurrent connections allowed from a single IP address.

\[10\]>

Enter the maximum number of messages per connection.

\[10\]>

Enter the maximum number of recipients per message.

\[50\]>

Do you want to override the hostname in the SMTP banner? [N]>

Would you like to specify a custom SMTP acceptance response? [N]>

Would you like to specify a custom SMTP rejection response? [N]>

Do you want to enable rate limiting per host? [N]>

Do you want to enable rate limiting per envelope sender? [N]>

Do you want to enable Directory Harvest Attack Prevention per host? [Y]>

Enter the maximum number of invalid recipients per hour from a remote host.

\[25\]>

Select an action to apply when a recipient is rejected due to DHAP:
1. Drop
2. Code

\[1\]>

Would you like to specify a custom SMTP DHAP response? [Y]>

Enter the SMTP code to use in the response. 550 is the standard code.

\[550\]>
Enter your custom SMTP response. Press Enter on a blank line to finish.

Would you like to use SenderBase for flow control by default? [Y]

Would you like to enable anti-spam scanning? [Y]

Would you like to enable anti-virus scanning? [Y]

Do you want to allow encrypted TLS connections?
1. No
2. Preferred
3. Required
4. Preferred - Verify
5. Required - Verify
[1]

Would you like to enable DKIM/DomainKeys signing? [N]

Would you like to enable DKIM verification? [N]

Would you like to change SPF/SIDF settings? [N]

Would you like to enable DMARC verification? [N] Y

Select the DMARC verification profile to use:
1. DEFAULT

[1] 1

Would you like to send aggregate reports? [N] Y

Note: DMARC reports should be DMARC compliant.
Secure delivery is recommended for delivery of DMARC reports.
Please enable TLS support using the `destconfig` command.

Would you like to enable envelope sender verification? [N] Y

Would you like to specify a custom SMTP response for malformed envelope senders? [Y]

Enter the SMTP code to use in the response. 553 is the standard code.
[553]

Enter your custom SMTP response. Press Enter on a blank line to finish.

Would you like to specify a custom SMTP response for envelope sender domains which do not resolve? [Y]

Enter the SMTP code to use in the response. 451 is the standard code.
[451]

Enter your custom SMTP response. Press Enter on a blank line to finish.

Would you like to specify a custom SMTP response for envelope sender domains which do not exist? [Y]

Enter the SMTP code to use in the response. 553 is the standard code.
[553]

Enter your custom SMTP response. Press Enter on a blank line to finish.

Would you like to enable use of the domain exception table? [N]

Do you wish to accept untagged bounces? [N]
Maximum Message Size: 20M
Maximum Number Of Concurrent Connections From A Single IP: 10
Maximum Number Of Messages Per Connection: 10
Maximum Number Of Recipients Per Message: 50
Directory Harvest Attack Prevention: Enabled
Maximum Number Of Invalid Recipients Per Hour: 25
Maximum Number Of Recipients Per Hour: Disabled
Maximum Number of Recipients per Envelope Sender: Disabled
Use SenderBase for Flow Control: Yes
Spam Detection Enabled: Yes
Allow TLS Connections: No
Allow SMTP Authentication: No
Require TLS To Offer SMTP authentication: No
DKIM/DomainKeys Signing Enabled: No
DKIM Verification Enabled: No
SPF/SIDF Verification Enabled: No
DMARC Verification Enabled: Yes
DMARC Verification Profile: DEFAULT
Aggregate reports: Yes
Envelope Sender DNS Verification Enabled: Yes
Domain Exception Table Enabled: No
Accept untagged bounces: No

There are currently 4 policies defined.
There are currently 5 sender groups.

Choose the operation you want to perform:
- NEW - Create a new entry.
- EDIT - Modify an entry.
- DELETE - Remove an entry.
- MOVE - Move an entry.
- DEFAULT - Set the defaults.
- PRINT - Display the table.
- IMPORT - Import a table from a file.
- EXPORT - Export the table to a file.
- RESET - Remove senders and set policies to system default.

Name: Listener 1
Type: Public
Interface: Management (172.29.181.70/24) TCP Port 25
Protocol: SMTP
Default Domain: <none configured>
Max Concurrent Connections: 300 (TCP Queue: 50)
Domain Map: Disabled
TLS: No
SMTP Authentication: Disabled
Bounce Profile: Default
Use SenderBase For Reputation Filters and IP Profiling: Yes
Footer: None
Heading: None
SMTP Call-Ahead: Disabled
LDAP: Off

Choose the operation you want to perform:
- NAME - Change the name of the listener.
- INTERFACE - Change the interface.
- CERTIFICATE - Choose the certificate.
- LIMITS - Change the injection limits.
- SETUP - Configure general options.
- HOSTACCESS - Modify the Host Access Table.
SMTP Services Configuration

- RCPTACCESS - Modify the Recipient Access Table.
- BOUNCECONFIG - Choose the bounce profile to use for messages injected on this listener.
- MASQUERADE - Configure the Domain Masquerading Table.
- DOMAINMAP - Configure domain mappings.

Currently configured listeners:
1. Listener 1 (on Management, 172.29.181.70) SMTP TCP Port 25 Public

Choose the operation you want to perform:
- NEW - Create a new listener.
- EDIT - Modify a listener.
- DELETE - Remove a listener.
- SETUP - Change global settings.

localeconfig

Description

Configure multi-lingual settings

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

mail3.example.com> localeconfig

Behavior when modifying headers: Use encoding of message body
Behavior for untagged non-ASCII headers: Impose encoding of message body
Behavior for mismatched encodings bodies and footers: Use encoding of message footer

Choose the operation you want to perform:
- SETUP - Configure multi-lingual settings.

[]> setup

If a header is modified, encode the new header in the same encoding as the message body?
(Some MUAs incorrectly handle headers encoded in a different encoding than the body. However, encoding a modified header in the same encoding as the message body may cause certain characters in the modified header to be lost.) [Y]

If a non-ASCII header is not properly tagged with a character set, impose the encoding of the body on the header during processing and final representation of the message? (Many MUAs create non-RFC-compliant headers that are then handled in an undefined way. Imposing the encoding of the body on the header may encode the header more precisely.) [Y]

When there is an encoding mismatch between the message body and a footer, the system initially attempts to encode the entire message in the same encoding as the message body. If the system cannot combine the message body and the footer in the same encoding, do you
want the system to failover and attempt to encode the entire message using the encoding of the message footer? (When this feature is enabled, the system will attempt to display the footer "in-line" rather than defaulting to adding it as an attachment.) [N] y

Behavior when modifying headers: Use encoding of message body
Behavior for untagged non-ASCII headers: Impose encoding of message body
Behavior for mismatched encodings bodies and footers: Use encoding of message body

Choose the operation you want to perform:
- SETUP - Configure multi-lingual settings.

[]> mail3.example.com>

smtpauthconfig

Description

Configure SMTP Auth outgoing and forwarding profiles.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

In the following example, the smtpauthconfig command is used to create a new, forwarding-based profile for the server “smtp2.example.com:”

mail3.example.com> smtpauthconfig

Choose the operation you want to perform:
- NEW - Create a new SMTP Auth profile
[]> new

Choose the type of profile you wish to create:
- FORWARD - Create an SMTP Auth forwarding server group profile
- OUTGOING - Create an outgoing SMTP Auth profile
[]> forward

Enter a name for this profile:
[]> forwarding-based

Please begin entering forwarding servers for this group profile.
Enter a hostname or an IP address for the forwarding server:
[]> smtp2.example.com

Enter a port:
[25]>

Choose the interface to use for forwarding requests:
1. Auto
2. Data 1 (192.168.1.1/24: mail3.example.com)
Data 2 (192.168.2.1/24: mail3.example.com)
Management (192.168.42.42/24: mail3.example.com)

```
[1]> Require TLS? (issue STARTTLS) [Y] > y
Enter the maximum number of simultaneous connections allowed: [10] >
Use SASL PLAIN mechanism when contacting forwarding server? [Y] >
Use SASL LOGIN mechanism when contacting forwarding server? [Y] >
Would you like to enter another forwarding server to this group? [N] >
```

Choose the operation you want to perform:
- NEW - Create a new SMTP Auth profile
- EDIT - Edit an existing SMTP Auth profile
- PRINT - List all profiles
- DELETE - Delete a profile
- CLEAR - Delete all profiles

```
[1]> mail3.example.com > commit
Please enter some comments describing your changes:
[1]> created SMTP auth profile
Do you want to save the current configuration for rollback? [Y] > n
Changes committed: Fri May 23 11:42:12 2014 GMT
```

---

Note
An authenticated user is granted a RELAY HAT policy.

Note
You may specify more than one forwarding server in a profile. SASL mechanisms CRAM-MD5 and DIGEST-MD5 are not supported between the Email Security appliance and a forwarding server.

---

System Setup

systemsetup

Description
First time system setup as well as re-installation of the system.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.
Example

mail3.example.com> systemsetup

WARNING: The system setup wizard will completely delete any existing 'listeners' and all associated settings including the 'Host Access Table' - mail operations may be interrupted.

Are you sure you wish to continue? [Y] > y

Before you begin, please reset the administrator password to a new value.
Old password:
New password:
Retype new password:

*****
You will now configure the network settings for the IronPort C100.
Please create a fully qualified hostname for the IronPort C100 appliance (Ex: "ironport-C100.example.com"): [ ] > ironport-C100.example.com

*****
You will now assign an IP address for the "Data 1" interface.
Please create a nickname for the "Data 1" interface (Ex: "Data 1"): [ ] > Data 1
Enter the static IP address for "Data 1" on the "Data 1" interface? (Ex: "192.168.1.1"): [ ] > 192.168.1.1
What is the netmask for this IP address? (Ex: "255.255.255.0" or "0xffffffff"): [255.255.255.0] >
You have successfully configured IP Interface "Data 1".

*****
Would you like to assign a second IP address for the "Data 1" interface? [Y] > n

What is the IP address of the default router (gateway) on your network?: [192.168.1.1] > 192.168.2.1

*****
Do you want to enable the web interface on the Data 1 interface? [Y] > y
Do you want to use secure HTTPS? [Y] > y

Note: The system will use a demo certificate for HTTPS.
Use the "certconfig" command to upload your own certificate.

*****
Do you want the IronPort C100 to use the Internet's root DNS servers or would you like it to use your own DNS servers?
1. Use Internet root DNS servers
2. Use my own DNS servers [1] > 2
Please enter the IP address of your DNS server. [>] 192.168.0.3

Do you want to enter another DNS server? [N]>

You have successfully configured the DNS settings.

*****

You are now going to configure how the IronPort C100 accepts mail by creating a "Listener".

Please create a name for this listener (Ex: "MailInterface"): [>] InboundMail

Please choose an IP interface for this Listener.
1. Data 1 (192.168.1.1/24: ironport-C100.example.com) [1]>

Enter the domain names or specific email addresses you want to accept mail for.

Hostnames such as "example.com" are allowed.
Partial hostnames such as ".example.com" are allowed.
Usernames such as "postmaster@" are allowed.
Full email addresses such as "joe@example.com" or "joe@[1.2.3.4]" are allowed.
Separate multiple addresses with commas. [>] example.com, .example.com

Would you like to configure SMTP routes for example.com, .example.com? [Y]>

Please specify the systems allowed to relay email through the IronPort C100.
Hostnames such as "example.com" are allowed.
Partial hostnames such as ".example.com" are allowed.
IP addresses, IP address ranges, and partial IP addresses are allowed.
Separate multiple entries with commas. [>] example.com, .example.com

Do you want to enable filtering based on SenderBase Reputation Service (SBRS) Scores for this listener? (Your selection will be used to filter all incoming mail based on its SBRS Score.) [Y]>

Do you want to enable rate limiting for this listener? (Rate limiting defines the maximum number of recipients per hour you are willing to receive from a remote domain.) [Y]>

Enter the maximum number of recipients per hour to accept from a remote domain. [>] 1000

Default Policy Parameters
-------------------------------
Maximum Message Size: 10M
Maximum Number Of Concurrent Connections From A Single IP: 10
Maximum Number Of Messages Per Connection: 10
Maximum Number Of Recipients Per Message: 50
Directory Harvest Attack Prevention: Enabled
Maximum Number Of Invalid Recipients Per Hour: 25
Maximum Number Of Recipients Per Hour: 1,000
Maximum Recipients Per Hour SMTP Response: 452 Too many recipients received this hour
Use SenderBase for Flow Control: Yes
Spam Detection Enabled: Yes
Virus Detection Enabled: Yes
Allow TLS Connections: No
Allow SMTP Authentication: No
Chapter 3      The Commands: Reference Examples

System Setup

Require TLS To Offer SMTP authentication: No
DKIM/DomainKeys Signing Enabled: No
DKIM Verification Enabled: No
SPF/SIDF Verification Enabled: No
DMARC Verification Enabled: No
Envelope Sender DNS Verification Enabled: No
Domain Exception Table Enabled: No
Accept untagged bounces: No
Would you like to change the default host access policy? [N] > n

Listener InboundMail created.
Defaults have been set for a Public listener.
Use the listenerconfig->EDIT command to customize the listener.

*****

Do you want to use Anti-Spam scanning in the default Incoming Mail policy? [Y] > y

Would you like to enable IronPort Spam Quarantine? [Y] > y
IronPort Anti-Spam configured globally for the IronPort C100 appliance. Use the policyconfig command (CLI) or Mail Policies (GUI) to customize the IronPort settings for each listener.
IronPort selected for DEFAULT policy

*****

Do you want to use Anti-Virus scanning in the default Incoming and Outgoing Mail policies? [Y] > y

1. McAfee Anti-Virus
2. Sophos Anti-Virus
Enter the number of the Anti-Virus engine you would like to use on the default Incoming and Outgoing Mail policies.
[ ] > 2
Sophos selected for DEFAULT policy

*****

Do you want to enable Outbreak Filters? [Y] > y
Outbreak Filters enabled.
Outbreak Filter alerts are sent when outbreak rules cross the threshold (go above or back down below), meaning that new messages of certain types could be quarantined or will no longer be quarantined, respectively.

Allow the sharing of limited data with SenderBase? [Y] > y
You have successfully configured Outbreak Filters and SenderBase.

*****

You will now configure system alerts.
Please enter the email address(es) to send alerts.
(Ex: "administrator@example.com")
Separate multiple addresses with commas.
[ ] > administrator@example.com

Would you like to enable IronPort AutoSupport, which automatically emails system alerts and weekly status reports directly to IronPort Customer Support? You will receive a complete copy of each message sent to IronPort.
(Recommended) [Y] > y

*****

You will now configure scheduled reporting.
Please enter the email address(es) to deliver scheduled reports to.
(Leave blank to only archive reports on-box.)
Separate multiple addresses with commas.
[] > administrator@example.com

*****

You will now configure system time settings.
Please choose your continent:
1. Africa
2. America
...
11. GMT Offset

Please choose your country:
1. Anguilla
...
47. United States
48. Uruguay
49. Venezuela
50. Virgin Islands (British)
51. Virgin Islands (U.S.)
[] > 47

Please choose your timezone:
1. Alaska Time (Anchorage)
...
26. Pacific Time (Los_Angeles)
[26] > 26

Do you wish to use NTP to set system time? [Y] > y

Please enter the fully qualified hostname or IP address of your NTP server, or press Enter to use time.ironport.com:
[time.ironport.com] >

*****

Would you like to commit these changes at this time? [Y] > y

Congratulations! System setup is complete.

For advanced configuration, please refer to the User Guide.
URL Filtering

This section contains the following CLI commands:

- aggregatorconfig
- urllistconfig
- webcacheflush
- websecurityadvancedconfig
- websecurityconfig
- websecuritydiagnostics

aggregatorconfig

Description

Configure address for Cisco Aggregator Server on the Email Security appliance. This server provides details of the end users who clicked on rewritten URLs and the action (allowed, blocked or unknown) associated with each user click.

Usage

Commit: This command requires a ‘commit’.
Cluster Management: This command can be used in all three machine modes (cluster, group, machine).
Batch Command: This command does not support a batch format.

Example

mail.example.com> aggregatorconfig

Choose the operation you want to perform:
- EDIT - Edit aggregator configuration
[]> edit

Edit aggregator address:
[aggregator.organization.com]> org-aggregator.com

Successfully changed aggregator address to : org-aggregator.com

urllistconfig

Description

Configure or import whitelists of URLs that will not be evaluated by URL filtering features. These lists are not used by the Outbreak Filters feature.
Usage

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command supports a batch format.

Example

```plaintext
> urllistconfig
No URL lists configured.
Choose the operation you want to perform:
NEW - Create a new URL list-
[ ]> new
Do you want to import a URL list? [N]> Enter a name for the URL list
[ ]> sample
Enter the URL domains that need to be skipped from scanning for URL Filtering.
Enter one URL domain per line and ‘.’ to finish.
cisco.com
ironport.com/*
*.example.com
10.2.4.5/24
[2001:DB8::1]
URL list sample added.
There are currently 4 URL lists configured.
Choose the operation you want to perform:
- NEW - Create a new URL whitelist.
- EDIT - Modify an existing URL whitelist.
- DELETE - Delete an existing URL whitelist.
[ ]> EDIT
Choose the operation to edit the URL whitelist:
- IMPORT - Import a file into an existing URL whitelist
- EXPORT - Export an existing URL whitelist into a file
- RENAME - Rename an existing URL whitelist
[ ]> IMPORT
Assign new name to the imported list? (By default, name stored in the file will be applied to the list)
[N] > Y
Enter name of the list > new_list
Enter filename to import from > URLfile
NOTE: These files will be stored in /pub/configuration
URL list “new_list” added.
```
webcacheflush

Description
Flush the cache used by URL filtering features. Use this command if you change the certificate that is used for communication with Cisco Web Security Services. Generally, you will use this command only at the direction of Cisco support.

Usage
Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example
> webcacheflush
Web Security cache has been flushed.

websecurityadvancedconfig

Description
Configure advanced settings for URL filtering.

Note
Except to change timeout values for troubleshooting purposes, use this command only under the direction of Cisco support.

The timeout value is the value, in seconds, for communication with the cloud services that provide reputation and category for URLs.

Usage
Commit: This command requires a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command supports a batch format.

Batch Format
For the batch format, see the CLI inline help.

Example
> websecurityadvancedconfig
Enter URL lookup timeout (includes any DNS lookup time) in seconds: [15]>

Enter the URL cache size (no. of URLs): [1215000]>

Do you want to disable DNS lookups? [N]>

Enter the maximum number of URLs that should be scanned: [100]>

Enter the Web security service hostname: [example.com]>

Enter the threshold value for outstanding requests: [20]>

Do you want to verify server certificate? [Y]>

Enter the default time-to-live value (seconds): [30]>

Do you want to include additional headers? [N]>

Enter the default debug log level for RPC server: [Info]>

Enter the default debug log level for SDS cache: [Info]>

Enter the default debug log level for HTTP client: [Info]>

websecurityconfig

Description

Configure basic settings for URL filtering (URL reputation and URL category features.)

Normally, certificate management is automatic. Unless directed to do otherwise by Cisco TAC, you should select No at the prompt to set a certificate.

Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command can be used in all three machine modes (cluster, group, machine).

Batch Command: This command supports a batch format. See the inline CLI help for more details. Use the help command to access the inline help for this command.

Example

mail.example.com> websecurityconfig

Enable URL Filtering? [N] > y
Do you wish to enable Web Interaction Tracking? [N]> y

Web Interaction Tracking is enabled.

Do you want to whitelist URLs using a URL list? [N]> y

1. urllist1
2. urllist2
3. No URL list
Enter the number of URL list
[1]> 1

URL list 'urllist1' added

mail.example.com> websecurityconfig

URL Filtering is enabled.
URL list 'urllist1' used.
System provided certificate used.
Web Interaction Tracking is enabled.

websecuritydiagnostics

Description

View diagnostic statistics related to URL filtering.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode.
Batch Command: This command does not support a batch format.

Example

mail.example.com> websecuritydiagnostics

Cache Size: 254
Cache Hits: 551
Response Time
  Minimum: None
  Average: 0.0
  Maximum: None
DNS Lookup Time
  Minimum: 9.4198775
  Average: 10.1786801765
  Maximum: 10.544356
User Management

This section contains the following CLI commands:

- userconfig
- password or passwd
- last
- who
- whoami

userconfig

Description

Manage user accounts and connections to external authentication sources.

Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command is restricted to cluster mode.

Batch Command: This command supports a batch format. See the inline CLI help for more details. Use the help command to access the inline help for this command, for example,

mail.example.com> userconfig help

Example - Creating a New User Account

The following example shows how to create a new user account with a Help Desk User role.

mail.example.com> userconfig

Users:
1. admin - "Administrator" (admin)

External authentication: Disabled

Choose the operation you want to perform:
- NEW - Create a new account.
- EDIT - Modify an account.
- DELETE - Remove an account.
- POLICY - Change password and account policy settings.
- PASSWORD - Change the password for a user.
- ROLE - Create/modify user roles.
- STATUS - Change the account status.
- EXTERNAL - Configure external authentication.
- DLTRACKING - Configure DLP tracking privileges.

[ ]> new

Enter the new username.
[ ]> helpdesk

Enter the full name for helpdesk.
[ ]> HELP DESK
Assign a role to "helpdesk":
1. Administrators - Administrators have full access to all settings of the system.
2. Operators - Operators are restricted from creating new user accounts.
3. Read-Only Operators - Read-Only operators may only view settings and status information.
4. Guests - Guest users may only view status information.
5. Technicians - Technician can only manage upgrades and feature keys.
6. Help Desk Users - Help Desk users have access only to ISQ and Message Tracking.

Would you like to get a system generated password? [N]>

Enter the password for helpdesk

Please enter the new password again:

Users:
1. admin - "Administrator" (admin)
2. helpdesk - "HELP DESK" (helpdesk)

Example - Setting Up a RADIUS Server for External Authentication

The following example shows how to set up a RADIUS server for external authentication. To set up a RADIUS server, enter the hostname, port, shared password, and whether to use CHAP or PAP for the authentication protocol.

Choose the operation you want to perform:
- NEW - Create a new account.
- EDIT - Modify an account.
- DELETE - Remove an account.
- POLICY - Change password and account policy settings.
- PASSWORD - Change the password for a user.
- ROLE - Create/modify user roles.
- STATUS - Change the account status.
- EXTERNAL - Configure external authentication.
- DLPTRACKING - Configure DLP tracking privileges.

Choose the operation you want to perform:
User Management

- SETUP - Set up global settings.

\[\] setup

Do you want to enable external authentication? [N] > Y

Please enter the timeout in seconds for how long the external authentication credentials will be cached. (Enter '0' to disable expiration of authentication credentials altogether when using one time passwords.)

\[0]\> 30

Choose a mechanism to use:
LDAP is unavailable because no LDAP queries of type EXTERNALAUTH are configured
1. RADIUS
\[1]\> 1

Configured RADIUS servers:
- No RADIUS servers configured

Choose the operation you want to perform:
- NEW - Add a RADIUS server configuration.
\[\] new

Please enter host name or IP address of the RADIUS server:
\[\] radius.example.com

Please enter port number of the RADIUS server:
\[1812]\>

Please enter the shared password:
>
Please enter the new password again:
>

Please enter timeout in seconds for receiving a valid reply from the server:
\[5]\>

1. CHAP
2. PAP
Select authentication type:
\[2]\>

Configured RADIUS servers:
Host                       Port  Timeout (s)  Auth type
------------------------- ----- ---------- ----------
radius.example.com        1812  5          pap

Choose the operation you want to perform:
- NEW - Add a RADIUS server configuration.
- EDIT - Modify a RADIUS server configuration.
- DELETE - Remove a RADIUS server configuration.
- CLEAR - Remove all RADIUS server configurations.
\[\]

password or passwd

Description

Change your password.
Usage

Commit: This command requires a ‘commit’.

Cluster Management: This command is restricted to cluster mode.

---

Note

The `passwd` command is a special case because it needs to be usable by guest users who can only ever be in machine mode. If a guest user issues the `passwd` command on a machine in a cluster, it will not print the warning message but will instead just silently operate on the cluster level data without changing the user's mode. All other users will get the above written behavior (consistent with the other restricted configuration commands).

---

Batch Command: This command does not support a batch format.

---

Example

```
mail3.example.com> password
Old password: your_old_password
New password: your_new_password
Retype new password: your_new_password
Password changed.
```

---

last

Description

The `last` command displays who has recently logged into the system. By default, it shows all users who have logged into the system.

Usage

Commit: This command does not require a ‘commit’.

Cluster Management: This command is restricted to machine mode.

Batch Command: This command does not support a batch format.

---

Example

```
elroy.run> last

<table>
<thead>
<tr>
<th>Username</th>
<th>Remote Host</th>
<th>Login Time</th>
<th>Logout Time</th>
<th>Total Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>admin</td>
<td>10.251.23.186</td>
<td>Thu Sep 01 09:14</td>
<td>still logged in</td>
<td>1h 5m</td>
</tr>
<tr>
<td>admin</td>
<td>10.251.23.186</td>
<td>Wed Aug 31 14:00</td>
<td>Wed Aug 31 14:01</td>
<td>1m</td>
</tr>
<tr>
<td>admin</td>
<td>10.251.23.142</td>
<td>Wed Aug 31 11:26</td>
<td>Wed Aug 31 11:38</td>
<td>11m</td>
</tr>
<tr>
<td>admin</td>
<td>10.251.23.142</td>
<td>Wed Aug 31 11:05</td>
<td>Wed Aug 31 11:09</td>
<td>4m</td>
</tr>
<tr>
<td>admin</td>
<td>10.251.23.142</td>
<td>Wed Aug 31 10:52</td>
<td>Wed Aug 31 10:53</td>
<td>1m</td>
</tr>
</tbody>
</table>
```
who

Description

The `who` command lists all users who are logged into the system via the CLI, the time of login, the idle time, and the remote host from which the user is logged in.

Usage

**Commit:** This command does not require a ‘commit’.

**Cluster Management:** This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto). This command requires access to the local file system.

**Batch Command:** This command does not support a batch format.

Example

```
mail3.example.com> who

Username  Login Time  Idle Time  Remote Host  What
========  ===========  =========  ===========  ====
admin     03:27PM     0s         10.1.3.201   cli
```

whoami

Description

The `whoami` command displays the username and full name of the user currently logged in, and which groups the user belongs to.

Usage

**Commit:** This command requires a ‘commit’.

**Cluster Management:** This command can be used in all three machine modes (cluster, group, machine).

**Batch Command:** This command does not support a batch format.

Example

```
mail3.example.com> whoami

Username: admin
```
Virtual Appliance Management

- loadlicense
- showlicense

loadlicense

Description


This command is available to users with Admin or Operator privileges.

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto).
Batch Command: This command does not support a batch format.

Example

```
mail.example.com> loadlicense
1 Paste via CLI
2 Load from file
How would you like to load a license file?
[1]> 2
Enter the name of the file in /configurations to import:
[]> <filename>

TERMS AND CONDITIONS OF USE
<Terms and conditions>

Do you accept the above license agreement?
[]> y
The license agreement was accepted.

The following feature key have been added:
<feature keys>

Errors and hardware misconfigurations may also be shown.
```
showlicense

Description
Displays information about the current virtual appliance license. Additional details are available using the featurekey command.
This command is available to users with Admin or Operator privileges.

Usage
Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine mode. It is further restricted to the login host (i.e., the specific machine you are logged onto).
Batch Command: This command supports a batch format.

Batch Format
The syntax of this command is: showlicense

Example
mail.example.com> showlicense

    company: Example Inc.
    org: Widget Division
    unit: Portland Data Center
    seats: 1000
    city: Portland
    state: Oregon
    country: US
    email: mailadmin@example.com
    begin_date: Tue Dec 6 17:45:19 2011
    end_date: Mon Sep 1 17:45:19 2014
    vln: ABC-123423123
    serial: 1003385