Cisco AsyncOS 8.0.1 CLI Reference Guide

Published: October 31, 2013
Revised: May 23, 2014

Cisco Systems, Inc.
www.cisco.com

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco website at www.cisco.com/go/offices.
THE SPECIFICATIONS AND INFORMATION REGARDING THE PRODUCTS IN THIS MANUAL ARE SUBJECT TO CHANGE WITHOUT NOTICE. ALL
STATEMENTS, INFORMATION, AND RECOMMENDATIONS IN THIS MANUAL ARE BELIEVED TO BE ACCURATE BUT ARE PRESENTED WITHOUT
WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. USERS MUST TAKE FULL RESPONSIBILITY FOR THEIR APPLICATION OF ANY PRODUCTS.

THE SOFTWARE LICENSE AND LIMITED WARRANTY FOR THE ACCOMPANYING PRODUCT ARE SET FORTH IN THE INFORMATION PACKET THAT
SHIPPED WITH THE PRODUCT AND ARE INCORPORATED HEREIN BY THIS REFERENCE. IF YOU ARE UNABLE TO LOCATE THE SOFTWARE LICENSE OR
LIMITED WARRANTY, CONTACT YOUR CISCO REPRESENTATIVE FOR A COPY.

The Cisco implementation of TCP header compression is an adaptation of a program developed by the University of California, Berkeley (UCB) as part of UCB’s public
domain version of the UNIX operating system. All rights reserved. Copyright © 1981, Regents of the University of California.

NOTWITHSTANDING ANY OTHER WARRANTY HEREIN, ALL DOCUMENT FILES AND SOFTWARE OF THESE SUPPLIERS ARE PROVIDED “AS IS” WITH
ALL FAULTS. CISCO AND THE ABOVE-NAMED SUPPLIERS DISCLAIM ALL WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, WITHOUT LIMITATION,
THOSE OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT OR ARISING FROM A COURSE OF DEALING, USAGE,
OR TRADE PRACTICE.

IN NO EVENT SHALL CISCO OR ITS SUPPLIERS BE LIABLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL, OR INCIDENTAL DAMAGES, INCLUDING,
WITHOUT LIMITATION, LOST PROFITS OR LOSS OR DAMAGE TO DATA ARISING OUT OF THE USE OR INABILITY TO USE THIS MANUAL, EVEN IF CISCO
OR ITS SUPPLIERS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

CCDE, CCENT, CCSI, Cisco Eos, Cisco HealthPresence, Cisco IronPort, the Cisco logo, Cisco Nurse Connect, Cisco Pulse, Cisco SensorBase, Cisco StackPower,
Cisco StadiumVision, Cisco TelePresence, Cisco Unified Computing System, Cisco WebEx, DCE, Flip Channels, Flip for Good, Flip Mino, Flipshare (Design), Flip Ultra,
Flip Video, Flip Video (Design), Instant Broadband, and Welcome to the Human Network are trademarks; Changing the Way We Work, Live, Play, and Learn, Cisco Capital,
Cisco Capital (Design), Cisco-Financed (Stylized), Cisco Store, Flip Gift Card, and One Million Acts of Green are service marks; and Access Registrar, Aironet, AllTouch,
AsyncOS, Bringing the Meeting To You, Catalyst, CCDP, CCIE, CCIP, CCNA, CCNP, CCSP, CCVP, Cisco, the Cisco Certified Internetwork Expert logo, Cisco IOS,
Cisco Lumin, Cisco Nexus, Cisco Press, Cisco Systems, Cisco Systems Capital, the Cisco Systems logo, Cisco Unity, Collaboration Without Limitation, Continuum,
EtherFast, EtherSwitch, Event Center, Explorer, Follow Me Browsing, GainMaker, iLYNX, IOS, iPhone, IronPort, the IronPort logo, Laser Link, LightStream, Linksys,
MeetingPlace, MeetingPlace Chime Sound, MGX, Networkers, Networking Academy, PCNow, PIX, PowerKEY, PowerPanels, PowerTV, PowerTV (Design), PowerVu,
Prisma, ProConnect, ROSA, SenderBase, SMARTnet, Spectrum Expert, StackWise, WebEx, and the WebEx logo are registered trademarks of Cisco Systems, Inc. and/or its
affiliates in the United States and certain other countries.

All other trademarks mentioned in this document or website are the property of their respective owners. The use of the word partner does not imply a partnership relationship
between Cisco and any other company. (0910R)

Any Internet Protocol (IP) addresses and phone numbers used in this document are not intended to be actual addresses and phone numbers. Any examples, command display
output, network topology diagrams, and other figures included in the document are shown for illustrative purposes only. Any use of actual IP addresses or phone numbers in
illustrative content is unintentional and coincidental.

Cisco AsyncOS 8.0.1 CLI Reference Guide
© 2013-2014 Cisco Systems, Inc. All rights reserved.
CONTENTS

Preface ix
Before you Read this Book ix
How This Book Is Organized x
Typographic Conventions xi
Cisco Support Community xi
Cisco IronPort Technical Training xi
Knowledge Base xii
Cisco IronPort Customer Support xii
Third Party Contributors xiii
IronPort Welcomes Your Comments xiii

CHAPTER 1
AsyncOS CLI Quick Reference Guide 1-1

CHAPTER 2
Command Line Interface: The Basics 2-1
Command Line Interface (CLI) 2-1
Accessing the Command Line Interface (CLI) 2-1
Command Line Interface Conventions 2-2
General Purpose CLI Commands 2-5
Batch Commands 2-6
Batch Command Example 2-7

CHAPTER 3
The Commands: Reference Examples 3-1
How to Read the Listing 3-1
Anti-Spam 3-2
antispamconfig 3-2
antispamstatus 3-4
antispamupdate 3-5
incomingrelayconfig 3-6
sblconfig 3-11
Anti-Virus 3-13
antivirusconfig 3-13
antivirusstatus 3-16
antivirusupdate 3-17
<table>
<thead>
<tr>
<th>Command</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>featurekey</td>
<td>3-96</td>
</tr>
<tr>
<td>featurekeyconfig</td>
<td>3-97</td>
</tr>
<tr>
<td>ntpconfig</td>
<td>3-98</td>
</tr>
<tr>
<td>reboot</td>
<td>3-101</td>
</tr>
<tr>
<td>remotepower</td>
<td>3-101</td>
</tr>
<tr>
<td>resume</td>
<td>3-102</td>
</tr>
<tr>
<td>resumedel</td>
<td>3-103</td>
</tr>
<tr>
<td>resumelistener</td>
<td>3-103</td>
</tr>
<tr>
<td>settime</td>
<td>3-104</td>
</tr>
<tr>
<td>settz</td>
<td>3-105</td>
</tr>
<tr>
<td>shutdown</td>
<td>3-107</td>
</tr>
<tr>
<td>sshconfig</td>
<td>3-108</td>
</tr>
<tr>
<td>status</td>
<td>3-110</td>
</tr>
<tr>
<td>supportrequest</td>
<td>3-112</td>
</tr>
<tr>
<td>suspend</td>
<td>3-114</td>
</tr>
<tr>
<td>suspenddel</td>
<td>3-114</td>
</tr>
<tr>
<td>suspendlistener</td>
<td>3-115</td>
</tr>
<tr>
<td>techsupport</td>
<td>3-116</td>
</tr>
<tr>
<td>tlsverify</td>
<td>3-117</td>
</tr>
<tr>
<td>trace</td>
<td>3-119</td>
</tr>
<tr>
<td>tzupdate</td>
<td>3-125</td>
</tr>
<tr>
<td>updateconfig</td>
<td>3-125</td>
</tr>
<tr>
<td>updatenow</td>
<td>3-129</td>
</tr>
<tr>
<td>version</td>
<td>3-130</td>
</tr>
<tr>
<td>upgrade</td>
<td>3-131</td>
</tr>
<tr>
<td>LDAP</td>
<td>3-132</td>
</tr>
<tr>
<td>ldapconfig</td>
<td>3-132</td>
</tr>
<tr>
<td>ldapflush</td>
<td>3-142</td>
</tr>
<tr>
<td>ldapconfig</td>
<td>3-143</td>
</tr>
<tr>
<td>sievechar</td>
<td>3-145</td>
</tr>
<tr>
<td>Mail Delivery Configuration/Monitoring</td>
<td>3-146</td>
</tr>
<tr>
<td>addresslistconfig</td>
<td>3-146</td>
</tr>
<tr>
<td>aliasconfig</td>
<td>3-149</td>
</tr>
<tr>
<td>archivemessage</td>
<td>3-154</td>
</tr>
<tr>
<td>altsrhost</td>
<td>3-155</td>
</tr>
<tr>
<td>bounceconfig</td>
<td>3-158</td>
</tr>
<tr>
<td>bouncerecipients</td>
<td>3-166</td>
</tr>
<tr>
<td>bvconfig</td>
<td>3-168</td>
</tr>
<tr>
<td>deleterecipients</td>
<td>3-171</td>
</tr>
<tr>
<td>deliveryconfig</td>
<td>3-174</td>
</tr>
</tbody>
</table>
delivernow 3-176
destconfig 3-176
Example: Global Settings 3-189
hostrate 3-190
hoststatus 3-191
oldmessage 3-194
rate 3-195
redirectrecipients 3-196
resetcounters 3-198
removemessage 3-198
showmessage 3-199
showrecipients 3-200
status 3-202
tophosts 3-204
topin 3-205
unsubscribe 3-208
workqueue 3-210

Networking Configuration / Network Tools 3-212
etherconfig 3-212
interfaceconfig 3-221
nslookup 3-228
netstat 3-229
ping 3-230
routeconfig 3-233
setgateway 3-237
sethostname 3-238
smtproutes 3-239
Use smtproutes -> EDIT to modify the domain for an SMTP route. 3-242
sslconfig 3-242
telnet 3-245
traceroute 3-246

Outbreak Filters 3-247
outbreakconfig 3-248
outbreakflush 3-250
outbreakstatus 3-250
outbreakupdate 3-253

Policy Enforcement 3-253
dictionaryconfig 3-253
exceptionconfig 3-262
Preface

The Cisco AsyncOS for Email CLI Reference Guide provides detail listings and examples for use of the AsyncOS command line interface on the IronPort Email Security appliance. These instructions are designed for an experienced system administrator with knowledge of networking and email administration.

Before you Read this Book

This guide assumes that you have already installed and configured your IronPort appliance. You should also be familiar with the Cisco AsyncOS for Email User Guide.

Note

If you have already cabled your appliance to your network, ensure that the default IP address for the IronPort 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 “Setup and Installation,” in the Cisco AsyncOS for Email User Guide for more information about assigning IP addresses to the IronPort appliance.

Documentation Set

The documentation for the Email Security appliance includes the following books:

- Cisco AsyncOS for Email User Guide
- Cisco Content Security Virtual Appliance Installation Guide
- Cisco AsyncOS CLI Reference Guide

<table>
<thead>
<tr>
<th>Documentation For Cisco Content Security Products</th>
<th>Location</th>
</tr>
</thead>
</table>
How This Book Is Organized

Chapter 1, “AsyncOS CLI Quick Reference Guide” provides a quick reference for most commands in the CLI.

Chapter 2, “Command Line Interface: The Basics” covers the basics of using the CLI: how to access the CLI, general CLI use, batch commands, and more.

Chapter 3, “The Commands: Reference Examples” provides sample CLI sessions for each command.

<table>
<thead>
<tr>
<th>Documentation For Cisco Content Security Products</th>
<th>Location</th>
</tr>
</thead>
</table>
## Typographic Conventions

<table>
<thead>
<tr>
<th>Typeface or Symbol</th>
<th>Meaning</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<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.</td>
</tr>
<tr>
<td>AaBbCc123</td>
<td>What you type, when contrasted with on-screen computer output.</td>
<td>mail3.example.com&gt; commit Please enter some comments describing your changes: []&gt; Changed the system hostname</td>
</tr>
<tr>
<td>AaBbCc123</td>
<td>Book titles, new words or terms, words to be emphasized. Command line variable; replace with a real name or value.</td>
<td>Read the <em>IronPort QuickStart Guide</em>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>The IronPort appliance <em>must</em> be able to uniquely select an interface to send an outgoing packet.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Before you begin, please reset your password to a new value.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Old password: ironport</td>
</tr>
<tr>
<td></td>
<td></td>
<td>New password: your_new_password</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Retype new password: your_new_password</td>
</tr>
</tbody>
</table>

## Cisco Support Community

Cisco Support Community is an online forum for Cisco customers, partners, and employees. It provides a place to discuss general email and web 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 Cisco and Cisco IronPort users.

You access the Cisco Support Community at the following URL:

https://supportforums.cisco.com

## Cisco IronPort Technical Training

Cisco IronPort Systems Technical Training Services can help you acquire the knowledge and skills necessary to successfully evaluate, integrate, deploy, maintain, and support IronPort security products and solutions.

Use one of the following methods to contact Cisco IronPort Technical Training Services:

**Training.** For question relating to registration and general training:

- [http://training.ironport.com](http://training.ironport.com)
- [training@ironport.com](mailto:training@ironport.com)
Certifications. For questions relating to certificates and certification exams:

- http://training.ironport.com/certification.html
- certification@ironport.com

Knowledge Base

You can access the IronPort Knowledge Base on the Cisco IronPort Customer Support page at the following URL:

http://cisco.com/web/ironport/index.html

You need a Cisco support account to access the site. If you do not already have an account, click the Register link on the Support page. Generally, only Cisco customers, partners, and employees can access the Support page.

The Knowledge Base contains a wealth of information on topics related to IronPort products.

Articles generally fall into one of the following categories:

- **How-To.** These articles explain how to do something with an IronPort product. For example, a how-to article might explain the procedures for backing up and restoring a database for an appliance.
- **Problem-and-Solution.** A problem-and-solution article addresses a particular error or issue that you might encounter when using an IronPort product. For example, a problem-and-solution article might explain what to do if a specific error message is displayed when you upgrade to a new version of the product.
- **Reference.** Reference articles typically provide lists of information, such as the error codes associated with a particular piece of hardware.
- **Troubleshooting.** Troubleshooting articles explain how to analyze and resolve common issues related to IronPort products. For example, a troubleshooting article might provide steps to follow if you are having problems with DNS.

Each article in the Knowledge Base has a unique answer ID number.

Cisco IronPort Customer Support

You can request Cisco IronPort product support by phone, email, or online 24 hours a day, 7 days a week. During Customer Support hours — 24 hours a day, Monday through Friday, excluding U.S. holidays — an engineer will contact you within an hour of your request.

To report a critical issue that requires urgent assistance outside of Customer Support hours, contact IronPort using one of the following methods:

- U.S. Toll-free: 1 (877) 641-4766
- International: http://cisco.com/web/ironport/contacts.html

If you purchased support through a reseller or another supplier, please contact that supplier directly with your product support issues.
Third Party Contributors

Some software included within IronPort AsyncOS is distributed under the terms, notices, and conditions of software license agreements of FreeBSD, Inc., Stichting Mathematisch Centrum, Corporation for National Research Initiatives, Inc., and other third party contributors, and all such terms and conditions are incorporated in IronPort license agreements.

The full text of these agreements can be found here:

Portions of the software within IronPort AsyncOS is based upon the RRDtool with the express written consent of Tobi Oetiker.

Portions of this document are reproduced with permission of Dell Computer Corporation. Portions of this document are reproduced with permission of McAfee, Inc. Portions of this document are reproduced with permission of Sophos Plc.

IronPort Welcomes Your Comments

The IronPort 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: docfeedback@ironport.com

Please include the following part number in the subject of your message: OL-23407-01.
AsyncOS CLI Quick Reference Guide

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

<table>
<thead>
<tr>
<th>CLI Command</th>
<th>Description</th>
<th>Platform Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>antispamstatus</td>
<td>Display Anti-Spam status</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>antispamupdate</td>
<td>Manually update spam definitions</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>antivirusstatus</td>
<td>Display anti-virus status</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>antivirusupdate</td>
<td>Manually update virus definitions</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>archivemessage</td>
<td>Archives older messages in your queue.</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>bouncerecipients</td>
<td>Bounce messages from the queue</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>clearchanges or clear</td>
<td>Clear changes</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>commit</td>
<td>Commit changes</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>commitdetail</td>
<td>Display detailed information about the last commit</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>deleterecipients</td>
<td>Delete messages from the queue</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>delivernow</td>
<td>Reschedule messages for immediate delivery</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>diagnostic</td>
<td>Check RAID disks, network caches, and SMTP connections. Clear network caches.</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>dig</td>
<td>Look up a record on a DNS server</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>dlprollback</td>
<td>Rollback RSA DLP Engine</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>dlpstatus</td>
<td>Version information for RSA DLP Engine</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>dipupdate</td>
<td>Update RSA DLP Engine</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>dnsflush</td>
<td>Clear all entries from the DNS cache</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>dnslistflush</td>
<td>Flush the current DNS List cache</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>dnslisttest</td>
<td>Test a DNS lookup for a DNS-based list service</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>dnssstatus</td>
<td>Display DNS statistics</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>encryptionstatus</td>
<td>Shows the version of the PXE Engine and Domain Mappings file</td>
<td>C- and X-Series</td>
</tr>
<tr>
<td>encryptionupdate</td>
<td>Requests an update to the PXE Engine</td>
<td>C- and X-Series</td>
</tr>
<tr>
<td>featurekey</td>
<td>Administer system feature keys</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>CLI Command</td>
<td>Description</td>
<td>Compatibility</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>grep</td>
<td>Search for text in a log file</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>help or h or ?</td>
<td>Help</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>hostrate</td>
<td>Monitor activity for a particular host</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>hoststatus</td>
<td>Get the status of the given hostname</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>last</td>
<td>Display who has recently logged into the system</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>ldapflush</td>
<td>Flush any cached LDAP results</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>ldaptest</td>
<td>Perform a single LDAP query test</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>mailconfig</td>
<td>Mail the current configuration to an email address</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>nslookup</td>
<td>Query a name server</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>netstat</td>
<td>Display network connections, routing tables, and network interface statistics.</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>outbreakflush</td>
<td>Clear the cached Outbreak Rules</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>outbreakstatus</td>
<td>Display current Outbreak Rules</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>outbreakupdate</td>
<td>Update Outbreak Filters rules</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>oldmessage</td>
<td>displays a list of old messages in the queue.</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>packetcapture</td>
<td>Intercept and display packets being transmitted or received over the network</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>ping</td>
<td>Ping a network host</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>quit or q or exit</td>
<td>Quit</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>rate</td>
<td>Monitor message throughput</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>reboot</td>
<td>Restart the system</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>removemessage</td>
<td>Removes old, undelivered messages from your queue.</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>redirectrecipients</td>
<td>Redirect all messages to another relay host</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>resetconfig</td>
<td>Restore the factory configuration defaults</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>resetcounters</td>
<td>Reset all of the counters in the system</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>resume</td>
<td>Resume receiving and deliveries</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>resumedel</td>
<td>Resume deliveries</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>resumelistener</td>
<td>Resume receiving</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>rollovernow</td>
<td>Roll over a log file</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>saveconfig</td>
<td>Saves the configuration to disk</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>sbstatus</td>
<td>Display status of SenderBase queries</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>settime</td>
<td>Manually set the system clock</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>showmessage</td>
<td>Displays old undelivered messages in your queue.</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>showconfig</td>
<td>Display all configuration values</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>showrecipients</td>
<td>Show messages from the queue by recipient host, Envelope From address, or all messages</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>shutdown</td>
<td>Shut down the system to power off</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>slblconfig</td>
<td>Configure End-User Safelist/Blocklist</td>
<td>C- and X-Series</td>
</tr>
</tbody>
</table>
The commands in Table 1-2 require you to issue the `commit` command in order to take effect.

### Table 1-2 CLI Commands (commit required)

<table>
<thead>
<tr>
<th>CLI Command</th>
<th>Description</th>
<th>Platform Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>addressconfig</td>
<td>Configure From: addresses for system generated mail</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>addresslistconfig</td>
<td>Configure address lists</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>adminaccessconfig</td>
<td>Configure network access list and banner login</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>alertconfig</td>
<td>Configure email alerts</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>aliasconfig</td>
<td>Configure email aliases</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>altarchost</td>
<td>Configure Virtual Gateway™ mappings</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>antispamconfig</td>
<td>Configure Anti-Spam policy</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>antivirusconfig</td>
<td>Configure anti-virus policy</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>bounceconfig</td>
<td>Configure the behavior of bounces</td>
<td>C-, X-, and M-Series</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CLI Command</th>
<th>Description</th>
<th>Platform Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>status</td>
<td>System status</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>supportrequest</td>
<td>Send a message to IronPort Customer Care</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>suspend</td>
<td>Suspend receiving and deliveries</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>suspenddel</td>
<td>Suspend deliveries</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>suspendlistener</td>
<td>Suspend receiving</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>systemsetup</td>
<td>First time system setup</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>tail</td>
<td>Continuously display the end of a log file.</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>techsupport</td>
<td>Allow IronPort customer service to access your system</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>telnet</td>
<td>Connect to a remote host</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>tlsverify</td>
<td>Establish an outbound TLS connection to a remote host and debug any TLS connection issues</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>tophosts</td>
<td>Display the top hosts by queue size</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>topin</td>
<td>Display the top hosts by number of incoming connections</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>trace</td>
<td>Trace the flow of a message through the system</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>traceroute</td>
<td>Display the network route to a remote host</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>trupdate</td>
<td>Update timezone rules</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>updatenow</td>
<td>Update all components</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>upgrade</td>
<td>Install an upgrade</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>version</td>
<td>View system version information</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>who</td>
<td>List who is logged in</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>whoami</td>
<td>Display your current user id</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>workqueue</td>
<td>Display and/or alter work queue pause status</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>Command</td>
<td>Description</td>
<td>Devices Supported</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>bvconfig</td>
<td>Configure key settings for outgoing mail, and configure how to handle invalid bounces.</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>certconfig</td>
<td>Configure security certificates and keys</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>clusterconfig</td>
<td>Configure cluster related settings</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>deliveryconfig</td>
<td>Configure mail delivery</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>destconfig</td>
<td>Configure options for the Destination Controls Table.</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>dictionaryconfig</td>
<td>Configure content dictionaries</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>dnsconfig</td>
<td>Configure DNS setup</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>dnslistconfig</td>
<td>Configure DNS List services support</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>domainkeysconfig</td>
<td>Configure DomainKeys support</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>emconfig</td>
<td>Configure the RSA Enterprise Manager interoperability settings</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>encryptionconfig</td>
<td>Configure email encryption</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>etherconfig</td>
<td>Configure Ethernet settings</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>exceptionconfig</td>
<td>Configure domain exception table</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>featurekeyconfig</td>
<td>Automatically check and update feature keys</td>
<td>C-, X-, and M-Series</td>
</tr>
<tr>
<td>filters</td>
<td>Configure message processing options</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>incomingrelayconfig</td>
<td>Configure Incoming Relays</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>interfaceconfig</td>
<td>Configure Ethernet IP addresses</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>listenerconfig</td>
<td>Configure mail listeners</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>ldapconfig</td>
<td>Configure LDAP servers</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>loadconfig</td>
<td>Load a configuration file</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>localeconfig</td>
<td>Configure multi-lingual settings</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>logconfig</td>
<td>Configure access to log files</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>ntpconfig</td>
<td>Configure NTP time server</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>outbreakconfig</td>
<td>Configure Outbreak Filters</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>password or passwd</td>
<td>Change your password</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>policyconfig</td>
<td>Configure per recipient or sender based policies</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>quarantineconfig</td>
<td>Configure system quarantines</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>remotepower</td>
<td>Set up the appliance to allow remote power reset of the appliance chassis for specified hardware only.</td>
<td>C, M, and S-Series</td>
</tr>
<tr>
<td>reportingconfig</td>
<td>Configure reporting settings</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>rollbackconfig</td>
<td>Rollback to one of the previously committed configurations</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>routeconfig</td>
<td>Configure IP routing table</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>scanconfig</td>
<td>Configure attachment scanning policy</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>senderbaseconfig</td>
<td>Configure SenderBase connection settings</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>setgateway</td>
<td>Set the default gateway (router)</td>
<td>C-, X-, and M- Series</td>
</tr>
</tbody>
</table>
### Table 1-2  CLI Commands (commit required) (Continued)

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
<th>Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>sethostname</td>
<td>Set the name of the machine</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>settz</td>
<td>Set the local time zone</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>sievechar</td>
<td>Configure characters for Sieve Email Filtering, as described in RFC 3598</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>smtpauthconfig</td>
<td>Configure SMTP Auto profiles</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>smtproutes</td>
<td>Set up permanent domain redirections</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>smmpconfig</td>
<td>Configure SNMP</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>sshconfig</td>
<td>Configure SSH keys</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>sslconfig</td>
<td>Configure SSL settings</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>stripheaders</td>
<td>Set message headers to remove</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>textconfig</td>
<td>Configure text resources</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>unsubscribe</td>
<td>Update the global unsubscribe list</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>updateconfig</td>
<td>Configure system update parameters</td>
<td>C- and X- Series</td>
</tr>
<tr>
<td>userconfig</td>
<td>Manage user accounts and connections to external authentication sources.</td>
<td>C-, X-, and M- Series</td>
</tr>
<tr>
<td>last</td>
<td>Add, edit, and remove users</td>
<td>C-, X-, and M- Series</td>
</tr>
</tbody>
</table>
Command Line Interface: The Basics

This chapter contains the following sections:

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

Command Line Interface (CLI)

The IronPort AsyncOS Command Line Interface is an interactive interface designed to allow you to configure and monitor the IronPort appliance. The commands are invoked by entering the command name, or in the case of batch format commands the command name with arguments (or parameters). If you enter the command without arguments, the command prompts you for the required information.

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 described in “Other Tasks in the GUI” in the Cisco IronPort AsyncOS Daily Management Guide to disable these services.

Accessing the Command Line Interface (CLI)

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 in the Cisco IronPort AsyncOS Configuration Guide 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) >
```


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 IronPort AsyncOS CLI 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 to IronPort AsyncOS while email operations proceed normally. Configuration changes will not take effect until you complete the following steps:

Step 1 Issue the **commit** command at the command prompt.
Step 2 Give the **commit** command the input required.
Step 3 Receive confirmation of the **commit** procedure at the CLI.

Changes to configuration that have not been committed will be recorded but not put into effect until the **commit** command is run.

---

**Note** Not all commands in AsyncOS require the **commit** command to be run. See Chapter 1, “AsyncOS 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 IronPort 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 to IronPort AsyncOS 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 changes made to the IronPort AsyncOS configuration 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>
```

Quitting the Command Line Interface Session

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`.)

```
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
```

Seeking Help on the Command Line Interface

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.

```
mail3.example.com> help
```

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 user inputs required to complete tasks and provides a mechanism allowing users to easily automate common configuration tasks. Batch commands also allow users to issue commands remotely using an SSH client. This enables users to easily script CLI commands and execute them on multiple appliances at one time.

Please note that these commands do not provide new functionality to your IronPort appliance; rather, they provide you with an additional method of execution for your appliance.

For the current release of AsyncOS these CLI commands have associated batch commands:

- `addresslistconfig`
- `adminaccessconfig`
- `aliasconfig`
- `delivernow`
- `destconfig`
- `dig`
Batch command syntax is dependent on the specific command being used. Please see the appropriate CLI example contained in Chapter 3, “The Commands: Reference Examples” for more information about syntax specific to that command.

**Batch Command Example**

In the following example, the sendergroup REDLIST is created. It is then associated with the policy THROTTLED, 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, 192.168.42.42/24) 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.

[\>] **NEW**
Chapter

1. New Sender Group

2. New Policy

[1]> 1

Enter a name for this sender group. (optional)

[ ]> REDLIST

Enter the hosts to add. CIDR addresses such as 10.1.1.0/24 are allowed.

IP address ranges such as 10.1.1.10-20 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

[ ]> possible_spammer.com

Select a behavior for this entry.

1. Accept
2. Relay
3. Reject
4. TCP Refuse
5. Continue
6. Policy: ACCEPTED
7. Policy: BLOCKED
8. Policy: THROTTLED
9. Policy: TRUSTED

[1]> 8
Enter a comment for this sender group.

[]>

There are currently 4 policies defined.

There are currently 6 sender groups.

To perform the same action using a CLI batch command:

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

example.com> commit
The Commands: Reference Examples

This chapter contains the following sections:

- Anti-Spam, page 3-2
- Anti-Virus, page 3-13
- Command Line Management, page 3-18
- Configuration File Management, page 3-22
- Cluster Management, page 3-28
- Data Loss Prevention, page 3-31
- Domain Keys, page 3-36
- DNS, page 3-54
- General Management/Administration/Troubleshooting, page 3-68
- LDAP, page 3-132
- Mail Delivery Configuration/Monitoring, page 3-146
- Networking Configuration / Network Tools, page 3-212
- Outbreak Filters, page 3-247
- Policy Enforcement, page 3-253
- Logging and Alerts, page 3-327
- Reporting, page 3-357
- Senderbase, page 3-365
- SMTP Services Configuration, page 3-367
- System Setup, page 3-400
- User Management, page 3-410

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:

Step 1  Does the command require a commit command to be implemented on the appliance?
Step 2  Is the command restricted to a particular mode (cluster, group, or machine)?
Step 3  Does the command permit a batch format?

For more information about Centralized Management, please see the Cisco IronPort AsyncOS Advanced Configuration Guide.

For more information about batch formats, please see “Command Line Interface: The Basics” on page 1.

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 Ironport Anti-Spam.

Table 3-1  antispamconfig - IronPort Anti-Spam Configuration

mail3.example.com> antispamconfig

Choose the operation you want to perform:

- IRONPORT - Configure IronPort Anti-Spam.
- 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

What is the largest size message that IronPort Anti-Spam scanning should scan?

[131072]>

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 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:
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

Table 3-2  \textit{antispamstatus} - IronPort Anti-Spam

mail3.example.com> \textit{antispamstatus}

Choose the operation you want to perform:

- **IRONPORT** - Display IronPort Anti-Spam version and rule information.
- **MULTISCAN** - Display Intelligent Multi-Scan version and rule information.

[]> \textit{ironport}

\begin{tabular}{|c|c|c|}
  \hline
  Component & Last Update & Version \\
  \hline
  CASE Core Files & Base Version & 2.7.1-101 \\
  Structural Rules & Base Version & 2.7.1-101-20091008_021703 \\
  CASE Utilities & Base Version & 2.7.1-101 \\
  Web Reputation DB & Never updated & 20050725_000000 \\
  Web Reputation Rules & Never updated & 20050725_000000-20050725_000000 \\
  \hline
\end{tabular}

Last download attempt made on: Never

\textbf{antispamupdate}

\textbf{Description}

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

\textbf{Usage}

This command does not require a ‘commit’.
This command is restricted to machine mode.
This command does not support a batch format.

Example

Table 3-3  antispamupdate

mail3.example.com> antispamupdate

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

Table 3-4 incomingrelayconfig

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 IronPort appliance determine the sender's originating IP address.

You should ONLY enable this command if your 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 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
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. CIDR addresses such as 10.1.1.0/24 are allowed. IP address ranges such as 10.1.1.10-20 are allowed. IP subnets such as 10.2.3. are allowed. Hostnames such as crm.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:
Table 3-4  incomingrelayconfig

[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>To Parse</th>
<th>Match</th>
<th>Received</th>
</tr>
</thead>
<tbody>
<tr>
<td>first-hop</td>
<td>192.168.1.1</td>
<td>Received</td>
<td>[</td>
<td>1</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
Table 3-4  incomingrelayconfig

Enter the IP address of the incoming relay. CIDR addresses such as 10.1.1.0/24 are allowed. IP address ranges such as 10.1.1.10-20 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.

[1]> 192.168.1.2

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]> 2

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

[1]> X-Connecting-IP

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

[1]> print

<table>
<thead>
<tr>
<th>Relay name:</th>
<th>IP address:</th>
<th>Header to parse:</th>
<th>Match after:</th>
<th>Received position:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>192.168.1.2</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</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.

Table 3-4  incomingrelayconfig

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>first-hop</td>
<td>192.168.1.1</td>
<td>Received</td>
<td>[</td>
<td>1</td>
</tr>
<tr>
<td>second-hop</td>
<td>192.168.1.2</td>
<td>X-Connecting-IP</td>
<td>n/a</td>
<td>n/a</td>
</tr>
</tbody>
</table>

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

[ ]> delete

1. first-hop: 192.168.1.1
2. second-hop: 192.168.1.2

Enter the number of the entry you wish to delete:

[1]> 1

Incoming relay "first-hop" deleted.

There is 1 relay defined.
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

<table>
<thead>
<tr>
<th>Table 3-5</th>
<th>Example of slblconfig</th>
</tr>
</thead>
<tbody>
<tr>
<td>mail.example.com&gt; slblconfig</td>
<td></td>
</tr>
</tbody>
</table>

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.

[]>

**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 125.

**Note**

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.

<table>
<thead>
<tr>
<th>Table 3-6</th>
<th><code>antivirusconfig</code></th>
</tr>
</thead>
<tbody>
<tr>
<td>mail3.example.com&gt; <code>antivirusconfig</code></td>
<td></td>
</tr>
</tbody>
</table>

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.
Chapter

Table 3-6  *antivirusconfig (Continued)*

This is recommended for your DEFAULT policy.

Sophos Anti-Virus: Enabled

Choose the operation you want to perform:
- SETUP - Configure Sophos Anti-Virus.

[]>

mail3.example.com>

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:

Table 3-7  *antivirusconfig - Viewing IDE Details*

mail3.example.com> `antivirusconfig`

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
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

Table 3-8  antivirusstatus

mail3.example.com> antivirusstatus

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SAV Engine Version</td>
<td>3.85</td>
</tr>
<tr>
<td>IDE Serial</td>
<td>2004101801</td>
</tr>
<tr>
<td>Engine Update</td>
<td>Mon Sep 27 14:21:25 2004</td>
</tr>
<tr>
<td>Last IDE Update</td>
<td>Mon Oct 18 02:56:48 2004</td>
</tr>
<tr>
<td>Last Update Attempt</td>
<td>Mon Oct 18 11:11:44 2004</td>
</tr>
<tr>
<td>Last Update Success</td>
<td>Mon Oct 18 02:56:47 2004</td>
</tr>
</tbody>
</table>

mail3.example.com>

antivirusupdate

Description

Manually update virus definitions.

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

Table 3-9  antivirusupdate

mail3.example.com> antivirusupdate

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.

Note

While performing a commit action on CLI, you can choose whether to save the current configuration for rollback. If you choose not to save the current configuration for rollback, the commit actions will be faster.

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

mail.example.com> commit

Please enter some comments describing your changes:
/> Changed "psinet" IP Interface to a different IP address
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

Table 3-10  commitdetail

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 changes made to the IronPort AsyncOS configuration 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

Table 3-11  clear

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

Table 3-12  help

mail3.example.com> help

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>
<tr>
<td>Fri May 23 05:45:51 2014</td>
<td>admin</td>
<td>edit user</td>
</tr>
</tbody>
</table>

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
Configuration File Management

This section contains the following CLI commands:

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

### loadconfig

**Description**

Load a configuration file.

**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.

**Table 3-14 loadconfig**

```plaintext
mail3.example.com> loadconfig
```

1. Paste via CLI
Table 3-14  loadconfig - Example 2

2. Load from file

[1]> 2

Enter the name of the file to import:

[]> 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:

[]> 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.

Table 3-15  loadconfig - Example 2

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.]
**Table 3-15  loadconfig - Example 2**

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 IronPort AsyncOS 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

Table 3-16  mailconfig

mail3.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

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

mail3.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.

resetconfig

Description

When physically transferring the appliance, you may want to start with factory defaults. The
resetconfig command resets all IronPort AsyncOS 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

**Table 3-17** \( \text{resetconfig} \)

mail3.example.com> **offline**

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.

**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

Table 3-18  

| saveconfig |

mail3.example.com> saveconfig

Do you want to include passwords? Please be aware that a configuration without passwords will fail when reloaded with loadconfig.  [N]> y

The file C60-00065B8FCEAB-31PM121-20030630T130433.xml has been saved in the configuration directory.

mail3.example.com>

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

Table 3-19  showconfig

ail3.example.com> showconfig

Do you want to include passwords? Please be aware that a configuration without passwords will fail when reloaded with loadconfig.

<?xml version="1.0" encoding="ISO-8859-1"?>
<!DOCTYPE config SYSTEM "config.dtd">

<!--
Product: IronPort model number Messaging Gateway Appliance(tm)
Model Number: model number
Version: version of AsyncOS installed
Serial Number: serial number
Current Time: current time and date
[The remainder of the configuration file is printed to the screen.]

Cluster Management

This section contains the following CLI commands:

- clusterconfig
- clustercheck

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, please see the Cisco IronPort AsyncOS Advanced Configuration Guide.

cclustercheck
c

description

The clustercheck command checks that all configuration databases in the cluster are synchronized.

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

For an explanation of the clustercheck command and its uses, please see the Cisco IronPort AsyncOS Advanced Configuration Guide.
Data Loss Prevention

This section contains the following CLI commands:

- dlprollback
- dlpstatus
- dlpupdate
- emconfig

**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 successfully.

**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**

**Table 3-20 Example of dlprollback**

```bash
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
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**

**Table 3-21 Example of dlpstatus**

<table>
<thead>
<tr>
<th>Component</th>
<th>Version</th>
<th>Last Updated</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSA DLP Engine</td>
<td>3.0.2.31</td>
<td>Never updated</td>
</tr>
</tbody>
</table>

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 is 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.

```bash
dlpupdate [force]
```

### Example

**Table 3-22 Example of `dlpupdate`**

- **Description:** Configure the interoperability settings for RSA Enterprise Manager.

```bash
mail.example.com> dlpupdate

Checking for available updates. This may take a few seconds...

<table>
<thead>
<tr>
<th>Component</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSA DLP Engine</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

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

```
[]> setup
```

Automatic updates for DLP are enabled

Do you wish to disable automatic updates for DLP Engine? [N]> y

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

```
[]>
```

**emconfig**

**Description**

Configure the interoperability settings for RSA Enterprise Manager.
RSA Enterprise Manager must already be configured via the DLP Global Settings page in the GUI before you can use the `emconfig` command. You cannot enable this functionality using the CLI, only edit the existing settings.

Usage

**Commit**: This command requires 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.

Batch Format

To set up a connection between the IronPort appliance and RSA Enterprise Manager:

```
emconfig setup [options]
```

<table>
<thead>
<tr>
<th><strong>Table 3-23</strong></th>
<th><strong>emconfig Setup Options</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option</strong></td>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><code>--remote_host</code></td>
<td>Hostname or IP address of the RSA Enterprise Manager.</td>
</tr>
<tr>
<td><code>--remote_port</code></td>
<td>Port to connect to on RSA Enterprise Manager.</td>
</tr>
<tr>
<td><code>--local_port</code></td>
<td>Port on the ESA for Enterprise Manager to connect.</td>
</tr>
<tr>
<td><code>--enable_ssl</code></td>
<td>Enable SSL communication to the RSA Enterprise Manager. Use 1 to enable, 0 to disable.</td>
</tr>
</tbody>
</table>
Example of Connecting to RSA Enterprise Manager

vm10esa0031.qa> emconfig

RSA Enterprise Manager connection status is: "UNKNOWN"

Choose the operation you want to perform:
- SETUP - Edit RSA Enterprise Manager interop config.

[]> setup

RSA Enterprise Manager: test.example.com:20000
Local port for EM to connect to: 20002
SSL Communication to RSA EM: disabled
Enter hostname of RSA Enterprise Manager:
[test.example.com]> em.example.com

Enter port number of RSA Enterprise Manager:
[20000]> 

Enter local port for EM to connect:
[20002]> 

Enable SSL communication to EM [N]> 

Advanced Settings:
  RSA Enterprise Manager GUID: emlocalsite
  Device Vendor name: Cisco Systems
  Device Status Interval: 5 seconds
  Polling Cycle Interval: 30 seconds
  Connection Throttle Interval: 0 milliseconds
Max event archive size: 31457280 bytes
Max files in event archive: 50
Max file size in event archive: 10485760 MB
Max size of event.xml file: 1048576 MB
Interoperability subsystem heartbeat interval: 500 milliseconds
Heartbeat service attempts before failing: 3
Connection timeout duration: 30 seconds
Command status timeout duration: 30 seconds
Max chunk size: 1000
Msg exchange cycle: 1
Do you want to change advanced settings? [N]>.

Choose the operation you want to perform:
- SETUP - Edit RSA Enterprise Manager interop config.

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.

Batch Format - Signing Profiles

The batch format of the domainkeysconfig 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>&lt;name&gt;</td>
<td>Name of domain profile.</td>
</tr>
<tr>
<td>&lt;type&gt;</td>
<td>Type of domain. Can be <code>dk</code> or <code>dkim</code>.</td>
</tr>
<tr>
<td>&lt;domain&gt;</td>
<td>Domain field of domain profile. This forms the <code>d</code> tag of the Domain-Keys signature.</td>
</tr>
<tr>
<td>&lt;selector&gt;</td>
<td>Selector field of domain profile. This forms the <code>s</code> tag of the Domain-Keys signature.</td>
</tr>
<tr>
<td>&lt;user-list&gt;</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>
<tr>
<td>[options]</td>
<td></td>
</tr>
<tr>
<td>--key_name</td>
<td>The name of the private key that will be used for signing.</td>
</tr>
<tr>
<td>--canon</td>
<td>The canonicalization algorithm to use when signing by DK. Currently supported algorithms are <code>simple</code> and <code>nofws</code>. Default is <code>nofws</code>.</td>
</tr>
<tr>
<td>--body_canon</td>
<td>The body canonicalization algorithm of to use when signing by DKIM. Currently supported algorithms are <code>simple</code> and <code>relaxed</code>. Default is <code>simple</code>.</td>
</tr>
<tr>
<td>--header_canon</td>
<td>The headers canonicalization algorithm of to use when signing by DKIM. Currently supported algorithms are <code>simple</code> and <code>relaxed</code>. Default is <code>simple</code>.</td>
</tr>
<tr>
<td>--body_length</td>
<td>Number of bytes of canonicalized body that are used to calculate the signature. Is used only in DKIM profiles. If used this value becomes <code>l</code> tag of the signature. By default it is not used.</td>
</tr>
</tbody>
</table>
Editing a signing profile:

domainkeysconfig profiles signing edit <name>
[signing-profile-options]

- --headers_select: 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. "standard" 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.

- --custom_headers: User-defined set of headers to sign. Is used only in DKIM profiles if headers_select is standard_and_custom. Default is empty set.

- --i_tag: Determines whether to include the i tag into the signature. Possible values are yes or no. Default is yes.

- --agent_identity: 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 <domain>. 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 <domain>.

- --q_tag: Determines whether to include the q tag into the signature. Possible values are yes or no. Default is yes.

- --t_tag: Determines whether to include the t tag into the signature. Possible values are yes or no. Default is yes.

- --x_tag: Determines whether to include the x tag into the signature. Possible values are yes or no. Default is yes.

- --expiration_time: 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).

- --z_tag: Determines whether to include the z tag into the signature. Possible values are yes or no. Default is no.
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 IronPort appliance:

  domainkeysconfig profiles signing export <filename>
• Delete all the signing profiles from the IronPort appliance:

```
   domainkeysconfig profiles signing clear
```

**Batch Format - Verification Profiles**

• Create a new DKIM verification profile:

```
   domainkeysconfig profiles verification new <name>
   <verification-profile-options>
```

**Table 3-25 domainkeysconfig Verification Profile Options**

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<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>
<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>
</tbody>
</table>
Table 3-25  *domainkeysconfig Verification Profile Options*

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<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 IronPort appliance:
  ```
  domainkeysconfig profiles verification export <filename>
  ```

- Delete all existing verification profiles from the IronPort 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 Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>--generate_key</td>
</tr>
<tr>
<td>--use_key</td>
</tr>
<tr>
<td>--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 IronPort appliance:**

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

Generate a private key. Possible key-length values (in bits) are 512, 768, 1024, 1536, and 2048.

Use supplied private key.

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.
Delete all signing keys on the IronPort appliance:

```
domainkeysconfig keys clear
```

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

- Search for a profile signing key:

```
domainkeysconfig search <search_text>
```

**Batch Format - Global Settings**

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

```
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 IronPort 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 3-51.

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

<table>
<thead>
<tr>
<th>Table 3-27 domainkeysconfig Example 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>mail3.example.com&gt; <code>domainkeysconfig</code></td>
</tr>
</tbody>
</table>

Number of DK/DKIM Signing Profiles: 0
Number of Signing Keys: 0
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.

[]> 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.

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.

[]> profiles

Choose the operation you want to perform:

- SIGNING - Manage signing profiles.
- VERIFICATION - Manage verification profiles.

[]> 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 headers:
1. simple
2. relaxed

Select canonicalization algorithm for body:
1. simple
2. relaxed

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.

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.

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> domainkeysconfig

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.
[]}> 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

[/] >

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]>

Cisco AsyncOS 8.0.1 CLI Reference Guide
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=MIGfMA0GCSqGSIb3DQEBAQUAA4GNADCBiQKBgQDf3Dwfo+qAr3o9GH1x3yUOlk
XzBn5fkgdR8Xdy7ghh4x4mbI6Nnc5y09nGdGYbH3rR67LnyY/L/K5cgq1yCi4Rt0SjiPKZ
cXQjziPKSpxAmmtbypm4yT93mu44FZkNzXJ40m71/F5UEwQL4ZUwNp36fV7y+wM+Y96n3
b1R9wIDAQAB;"

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.
This section contains the following CLI commands:

- **dig**
- **dnsconfig**
- **dnsflush**
- **dnslistconfig**
- **dnslistflush**
- **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**
  
  ```
  dig [options] [@<dns_ip>] [qtype] <hostname>
  ```

- **Do a reverse lookup for given IP address on a DNS server**
  
  ```
  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).

- `dns_ip` - Query the DNS server at this IP address.
- `qtype` - Query type: A, PTR, CNAME, MX, SOA, NS, TXT.
- `hostname` - Record that user want to look up.
- `reverse_ip` - Reverse lookup IP address.
- `dns_ip` - Query the DNS server at this IP address.

**Example**

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

```
mail.com> dig @111.111.111.111 example.com MX
```

```plaintext
; <<< DiG 9.4.3-P2 <<< @111.111.111.111 example.com MX
; (1 server found)
;; global options: printcmd
;; Got answer:
```
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>new</td>
<td>Add a new alternate DNS server to use for specific domains or local DNS server.</td>
</tr>
<tr>
<td>delete</td>
<td>Remove an alternate server or local DNS server.</td>
</tr>
<tr>
<td>edit</td>
<td>Modify an alternate server or local DNS server.</td>
</tr>
<tr>
<td>setup</td>
<td>Switch between Internet root DNS servers or local DNS servers.</td>
</tr>
</tbody>
</table>
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]> 1

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

[1]>

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

Table 3-30  \texttt{dnsconfig} -Adding Alternate DNS Servers

\begin{verbatim}
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.
\end{verbatim}
Table 3-30  \texttt{dnsconfig} - Adding Alternate DNS Servers (Continued)

- SETUP - Configure general settings.

[]> \texttt{new}

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

[]> \texttt{example.com}

Please enter the fully qualified hostname of the DNS server for the domain "example.com".

(Ex: "dns.example.com").

[]> \texttt{dns.example.com}

Please enter the IP address of dns.example.com.

[]> \texttt{10.1.10.9}

Currently using the Internet root DNS servers.

Alternate authoritative DNS servers:

1. \texttt{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.

Table 3-31  

\textit{dnsconfig - Using your own DNS cache servers}

```
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.

\[ \]

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.

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)

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

Enter the minimum TTL in seconds for DNS cache.

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**

```
Table 3-32  dnsflush

tab3.example.com> dnsflush

Are you sure you want to clear out the DNS cache? [N]> Y
```

**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
Table 3-33  

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.

[]> setup

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

Enter the query timeout in seconds:
[3]>

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.

[]>

mail3.example.com>
**dnslistflush**

**Description**

Flush the current DNS List 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**

```
Table 3-34   dnslistflush

mail3.example.com> dnslistflush

Are you sure you want to clear out the DNS List cache? [N]> y

DNS List cache has been cleared.

mail3.example.com>
```

**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

Table 3-35  dnslisttest

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

mail3.example.com>

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

Table 3-36  dnsstatus

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>

mail3.example.com>

General Management/Administration/Troubleshooting

This section contains the following CLI commands:

- addressconfig
- adminaccessconfig
- certconfig
- diagnostic
- encryptionconfig
- encryptionstatus
- encryptionupdate
- featurekey
- featurekeyconfig
- ntpconfig
- reboot
- remotepower
- resume
- resumefdel
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
- Notifications (notify() and notify-copy() filter actions)
- tine notifications (duplicate() filter action)

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

Table 3-37  addressconfig

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>

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.
- 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

[None]> example.com

Current anti-virus from: "Mail Delivery System" <MAILER-DAEMON@domain>
adminaccessconfig

Description

Configure network access list and banner login.

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>

- 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

---

**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 three sets of IP addresses:

Table 3-38   adminaccessconfig - Network Access List

<table>
<thead>
<tr>
<th>mail3.example.com&gt; adminaccessconfig</th>
</tr>
</thead>
</table>

Choose the operation you want to perform:
Table 3-38  adminaccessconfig - Network Access List

- BANNER - Configure login message (banner) for appliance administrator login.
- IPACCESS - Configure IP-based access for appliance administrative interface.

[]> 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.

[]> 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:
Table 3-38  adminaccessconfig - Network Access List

- 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
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.

[]> new

Please enter IP address, subnet or range.

[]> 192.168.2.2

List of allowed IP addresses/Subnets/Ranges:
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 [192.168.126] 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]> n

List of allowed IP addresses/Subnets/Ranges:

1. 192.168.1.2-100
2. 192.168.255.12
3. 192.168.2.2

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.
Example - Configuring Network Access List

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:

Table 3-39 adminaccessconfig - Banner List

Choose the operation you want to perform:

- BANNER - Configure login message (banner) for appliance administrator login.
- IPACCESS - Configure IP-based access for appliance administrative interface.

[]> 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.

^D

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.

[]>
**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.

Table 3-40  cer**tconfig** - Pasting in a certificate

```
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

[>] 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-----
MIICLDCCAdYCAQAwDQYJKoZIhvcNAQEEBQAwgaAxCzAJBgNVBAYTAlBUMRMwEQYDVQQIEwpRdWV1bnNmYW5kMQ8wDQYDVQQHEwZMaXNiNib2ExFzAVBgNVBAsoTDDk5ldXJvbnNpel8wggEiMA0GCSqGSIb3DQEJARYMc2FtcG9AaWtpLmZpMB4X
MIDvJnGEuMRgwFgYDVQQLEwZMaXNiNib2ExFzAVBgNVBAsoTDDk5ldXJvbnNpel8wggEiMA0GCSqGSIb3DQEJARYMc2FtcG9AaWtpLmZpMB4X
C=PT,ST=Queensland,L=Lisboa,O=Neuronio,Lda.,OU=Desenvolvimento,CN=brutus.partner.com,emailAddress=admin@example.com

-----END CERTIFICATE-----
.

Paste private key in PEM format (end with '.'):  

-----BEGIN RSA PRIVATE KEY-----
MIIBPAIBAAJBAL7+aty3Si1IBA/+yxjv4q1MUTd1kjNwL4YKbpxsll5m5beaQXeQ2RmGNTmu+mDvuqItjVHOK3DvPK7TcSGftUCAWEAATANBgkqhkiG9w0BAQQAANBAFqPEKFj6t6CKTHvaseEAsX0/8YHPHqH/9AnhsJrvwUX9Ebc0n6VGhN7XaXd6s77ym9ebsWxb+pJdurnkxjx4=

-----END RSA PRIVATE KEY-----
.

C=PT,ST=Queensland,L=Lisboa,O=Neuronio,
Lda.,OU=Desenvolvimento, CN=brutus.partner.com, emailAddress=admin@example.com
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:
Example - Creating a self-signed certificate

In the following example, a self-signed certificate is created.

<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

```bash
[]> new
```

Enter a name for this certificate profile:

```bash
> example.com
```

Enter Common Name:

```bash
> example.com
```

Enter Organization:

```bash
> Example
```

Enter Organizational Unit:

```bash
> Org
```

Enter Locality or City:

```bash
> San Francisco
```

Enter State or Province:

```bash
> CA
```
**Table 3-41 certconfig - Creating a self-signed certificate**

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-----
MIICrTCCAZUCAQAwaDELMAkGA1UEBhMCVVMxFDASBgNVBAMTC2V4YW1wbGUuY29t
MRYwFAYDVQQHEw1TYW4gRnJhbmNpc29jMRAwDgYDVQQKEw1leGFtcGxlMQswCQYD
VQIvEMoGA1UECxMDb3JnMIIBiJANBgkqhqkigGw0BAQEFAAOCAQ8AMIIB
CgKCAQEA+NwamZyX7VgT7Ka/xI55/sN9V2MPKXoLq7FjzUtIIdwznElrKiuJovw
Swonle6GvFIUhjf8B3Wobozk5N6btKjwPrBfaY+qr7rzM41AQKH+P6l+lZnPU
P05N9RckLP4XsUyY6Ca1WLTiPIgaq2fR8Y0JX/kesZcGoqde66pN+xJIIIYaD
oopGqi6SLNfAzJu/HEu/fnSuG4nhF02GlOpVUX4fg33NW24wV10Xb3GrOjbbA
ih9ozAwfNzxb5amtxEJk+pW+co3uEHLJOPdih9Shzn/UVU4hiu8rSQR19sDApp
kfdWcaDL9tnQjFSYiC0USyCQ8QIDAQAbAoAAwDQYJKoZIhvcNAQEBQADgEB
AGtV4yMAuSSHv9yA08ko3CmorG089yR1nUXDDD61rODVKx4hT10anOPu1nsThSvH
7xV4xR35T/QV0U3yPrL6bJbwmMySOLTJr8UcwZNjOEiXM5EBBM2B015sr4LS9g
FhHvejgIllyYDL0U82wSLMqLFH1IT63tzwVrIkXmAu/1HYci3+vctb+ sopnNI
1YlO1uJ+EgQ9NzRBNnKXLTdXkzhELOd8v2EqSAFBWqrjZ2mECc7G3evqkw/OGLk
A1lNXHaiGjeY+UfWzF/HB5ekSJtQu6fIv6JpBSY/MnYU4t11Exq+GX3lr4xc4
-----END CERTIFICATE REQUEST-----
```
The diagnostic command is used to check RAID disks, view and clear cache information, and to test connectivity to other mail servers.

### diagnostic

#### Description

The diagnostic command is used to check RAID disks, view and clear cache information, and to test connectivity to other mail servers.
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</td>
<td></td>
</tr>
<tr>
<td></td>
<td>progress</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Display disk verify</td>
<td></td>
</tr>
<tr>
<td></td>
<td>verdict</td>
<td></td>
</tr>
<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>SMITPPING</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TCPDUMP</td>
<td></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:

- Check the RAID status

  diagnostic raid

- Clear the LDAP, DNS and ARP caches

  diagnostic network flush

- Display the ARP cache:

  diagnostic network arpshow
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.

```
Table 3-43 diagnostic

mail3.example.com> diagnostic

Choose the operation you want to perform:
- RAID - Disk Verify Utility.
- NETWORK - Network Utilities.
[>] network

Choose the operation you want to perform:
- FLUSH - Flush all network related caches.
- ARPSHOW - Show system ARP cache.
- SMTPPING - Test a remote SMTP server.
[>] arpshow

System ARP cache contents:

(163.17.0.1) at 00:02:b1:cf:10:11 on fxp0 [ethernet]

Choose the operation you want to perform:
- FLUSH - Flush all network related caches.
- ARPSHOW - Show system ARP cache.
- SMTPPING - Test a remote SMTP server.
[>] flush

Flushing LDAP cache.

Flushing DNS cache.
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.

<table>
<thead>
<tr>
<th>Table 3-44 diagnostic</th>
<th>SMTPPING</th>
</tr>
</thead>
</table>

 mail3.example.com> diagnostic

Choose the operation you want to perform:
- RAID - Disk Verify Utility.
- NETWORK - Network Utilities.

[>] network

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

[>] smtpping

Enter the hostname or IP address of the SMTP server:

[mail3.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. d1.mail.com
2. d2.mail.com
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:

*Table 3-45 encryptionconfig*

eexample.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]>

y

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

1> edit

1. HIPAA

Select the profile you wish to edit:

[1]> 1

Profile name: HIPAA
External URL: https://res.cisco.com
Encryption algorithm: ARC4
Return receipts enabled: Yes
Envelope sensitivity: High
Secure Forward enabled: No
Secure Reply All enabled: No
Suppress Applet: No
URL associated with logo image: <undefined>
Text notification template: System Generated
HTML notification template: System Generated
Encryption queue timeout: 14400
Failure notification subject: [ENCRYPTION FAILURE]
Choose the operation you want to perform:

- **NAME** - Change profile name
- **EXTERNAL** - Change external URL
- **ALGORITHM** - Change encryption algorithm
- **RECEIPT** - Change return receipt handling
- **SENSITIVITY** - Change envelope sensitivity
- **FORWARD** - Change 'Secure Forward' setting
- **REPLYALL** - Change 'Secure Reply All' setting
- **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

1. Medium (password required to open envelopes, but credentials may be cached)
2. High (password required and passphrase enabled, and credentials may not be cached)
3. No Password Required (The recipient does not need a password to open the encrypted message.)

Please enter the envelope sensitivity level:

```
[2]> 1
```

Profile name: HIPAA

External URL: https://res.cisco.com

Encryption algorithm: ARC4

Return receipts enabled: Yes

Envelope sensitivity: High
Table 3-45  encryptionconfig

Secure Forward enabled: No
Secure Reply All enabled: No
Suppress Applet: No
URL associated with logo image: <undefined>
Text notification template: System Generated
HTML notification template: System Generated
Encryption queue timeout: 14400
Failure notification subject: [ENCRYPTION FAILURE]
Failure notification template: System Generated

Choose the operation you want to perform:
- NAME - Change profile name
- EXTERNAL - Change external URL
- ALGORITHM - Change encryption algorithm
- RECEIPT - Change return receipt handling
- SENSITIVITY - Change envelope sensitivity
- FORWARD - Change "Secure Forward" setting
- REPLYALL - Change "Secure Reply All" setting
- 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

[]> forward

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

Profile name: HIPAA
External URL: https://res.cisco.com
Choose the operation you want to perform:

- NAME - Change profile name
- EXTERNAL - Change external URL
- ALGORITHM - Change encryption algorithm
- RECEIPT - Change return receipt handling
- SENSITIVITY - Change envelope sensitivity
- FORWARD - Change "Secure Forward" setting
- REPLYALL - Change "Secure Reply All" setting
- 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

Proxy: Not Configured

Table 3-45  

<table>
<thead>
<tr>
<th>encryptionconfig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encryption algorithm: ARC4</td>
</tr>
<tr>
<td>Return receipts enabled: Yes</td>
</tr>
<tr>
<td>Envelope sensitivity: High</td>
</tr>
<tr>
<td>Secure Forward enabled: Yes</td>
</tr>
<tr>
<td>Secure Reply All enabled: No</td>
</tr>
<tr>
<td>Suppress Applet: No</td>
</tr>
<tr>
<td>URL associated with logo image: &lt;undefined&gt;</td>
</tr>
<tr>
<td>Text notification template: System Generated</td>
</tr>
<tr>
<td>HTML notification template: System Generated</td>
</tr>
<tr>
<td>Encryption queue timeout: 14400</td>
</tr>
<tr>
<td>Failure notification subject: [ENCRYPTION FAILURE]</td>
</tr>
<tr>
<td>Failure notification template: System Generated</td>
</tr>
</tbody>
</table>
**encryptionstatus**

**Description**

The `encryptionstatus` command shows the version of the PXE Engine and Domain Mappings file on the IronPort 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**

```
Table 3-46 encryptionstatus

<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>
```

**encryptionupdate**

**Description**

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

**Table 3-47 encryptionupdate**

```plaintext
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.

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.

**Table 3-48**

<table>
<thead>
<tr>
<th>Module</th>
<th>Quantity</th>
<th>Remaining</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bounce Verification</td>
<td>1</td>
<td>30 days</td>
<td>Fri Jun 30 18:57:26 2006</td>
</tr>
<tr>
<td>IronPort Anti-Spam</td>
<td>1</td>
<td>28 days</td>
<td>Thu Jun 29 15:20:23 2006</td>
</tr>
<tr>
<td>Incoming Mail Handling</td>
<td>1</td>
<td>28 days</td>
<td>Thu Jun 29 15:20:31 2006</td>
</tr>
<tr>
<td>Virus Outbreak Filters</td>
<td>1</td>
<td>28 days</td>
<td>Thu Jun 29 15:20:24 2006</td>
</tr>
<tr>
<td>Sophos Anti-Virus</td>
<td>1</td>
<td>28 days</td>
<td>Thu Jun 29 15:20:23 2006</td>
</tr>
</tbody>
</table>
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.

```
<table>
<thead>
<tr>
<th>Table 3-49</th>
<th>featurekeyconfig</th>
</tr>
</thead>
<tbody>
<tr>
<td>mail3.example.com&gt; featurekeyconfig</td>
<td></td>
</tr>
</tbody>
</table>

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

No new feature keys are available.
Table 3-49 featurekeyconfig

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

ntpconfig

Description

The ntpconfig command configures IronPort 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

Table 3-50 ntpconfig

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.edu

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

Table 3-51  reboot

mail3.example.com> reboot

Enter the number of seconds to wait before abruptly closing connections.

[30]> 

Waiting for listeners to exit...

Receiving suspended.

Waiting for outgoing deliveries to finish...

Mail delivery suspended.

remotepower

Description

Configure the ability to remotely reset power to the appliance chassis using a third-party Intelligent Platform Management Interface (IPMI) tool that supports version 2.0. The following IPMI commands are supported: status, on, off, cycle, reset, diag, soft.

This command runs only on the following hardware: C380 and C680, M380 and M680, and S380 and S680.

You will need a dedicated IPv4 address for the Remote Power Management interface. This interface is configurable only via the remotepower command; it cannot be configured using the ipconfig command.

The username and password that you specify with this command will be required in order to remotely reset appliance power.
Note

Ensure that the dedicated Remote Power Management port is cabled directly to a secure network. For information, see the Hardware Installation Guide. Verify that any required ports through the firewall are open and that the appliance can be accessed remotely.

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

esa01> remotepower

Current remote power settings:
Access to IPMI remote power commands currently disabled.

Choose the operation you want to perform:
- SETUP - Configure IPMI for chassis remote power access.
[>] setup

Do you want to enable remote access to chassis power commands?
[No]> y

Please enter the IP address (IPv4 only) for the chassis.
[>] 192.0.2.254

Please enter the netmask.
[>] 255.255.255.0

Please enter the gateway address.
[>] 192.0.2.1

Please enter the user name that will be used to log in to the chassis.
[>] user1

Please enter the password.
>
Please enter the password again to confirm.
>

Current remote power settings:
Access to IPMI remote power commands enabled.
IP Address: 192.0.2.254
Netmask: 255.255.255.0
Gateway: 192.0.2.1
User name: user1

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

Table 3-52  resume

mail3.example.com> resume

Receiving resumed.
Mail delivery resumed.

mail3.example.com>

resumedelta

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

Table 3-53  resumedelta

mail3.example.com> resumedelta

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

#### Table 3-54  resumelistener

```
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>
```

### 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

Table 3-55  settime

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

**Table 3-56  settz**

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]> 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:
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

**Table 3-57  shutdown**

mail3.example.com> **shutdown**

Enter the number of seconds to wait before abruptly closing connections.

[30]>

System shutting down. Please wait while the queue is being closed.

Closing CLI connection.

Use the power button (in 30 seconds) to turn off the machine.

**sshconfig**

**Description**

Configure SSH keys.

**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.

**Example**

In the following example, a new public key is installed for the admin account:

**Table 3-58  sshconfig - Install a New Public Key for the ‘Admin’ Account**

mail3.example.com> **sshconfig**

Currently installed keys for admin:

Choose the operation you want to perform:

- **NEW** - Add a new key.
Disabling SSH1

To disable (or enable) SSH1, use the setup subcommand of the sshconfig command:

Table 3-59   sshconfig - Enabling/Disabling SSH1

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>setup</td>
<td>Configure general settings</td>
</tr>
</tbody>
</table>

Disabling SSH1

To disable (or enable) SSH1, use the setup subcommand of the sshconfig command:

Table 3-59   sshconfig - Enabling/Disabling SSH1

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>setup</td>
<td>Configure general settings</td>
</tr>
</tbody>
</table>

Currently installed keys for admin:

1. ssh-dss AAAAB3NzaC1kc3MA...CapRrgxcY= (admin@example.com)

Choose the operation you want to perform:

- NEW - Add a new key.
- EDIT - Modify a key.
- DELETE - Remove a key.
- PRINT - Display a key.

[]>

---

Table 3-58   sshconfig - Install a New Public Key for the 'Admin' Account  (Continued)

- USER - Switch to a different user to edit.
- SETUP - Configure general settings.

[]> new

Please enter the public SSH key for authorization.

Press enter on a blank line to finish.

[cut and paste public key for user authentication here]
Table 3-59  \textit{sshconfig} - Enabling/Disabling SSH1 (Continued)

- USER - Switch to a different user to edit.
- SETUP - Configure general settings.

[>] \texttt{setup}

Choose the operation you want to perform:
- DISABLE - Disable SSH v1

[>] \texttt{disable}

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.
- SETUP - Configure general settings

[>]

\textbf{status}

\textbf{Description}

Show system status.

\textbf{Usage}

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

**Table 3-60 status**

```
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

Counters:                               Reset     Uptime    Lifetime
Receiving
  Messages Received              62,049,822    290,920   62,049,822
  Recipients Received           62,049,823    290,920   62,049,823
Rejection
  Rejected Recipients           3,949,663     11,921    3,949,663
  Dropped Messages              11,606,037     219     11,606,037
Queue
  Soft Bounced Events           2,334,552     13,598    2,334,552
Completion
  Completed Recipients          50,441,741    332,625   50,441,741
Current IDs
  Message ID (MID)              99524480
  Injection Conn. ID (ICID)     51180368
  Delivery Conn. ID (DCID)      17550674

Gauges:                               Current
Connections
  Current Inbound Conn.          0
```
Table 3-60  status (Continued)

<table>
<thead>
<tr>
<th>Description</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Outbound Conn.</td>
<td>14</td>
</tr>
<tr>
<td>Queue</td>
<td></td>
</tr>
<tr>
<td>Active Recipients</td>
<td>7,166</td>
</tr>
<tr>
<td>Messages In Work Queue</td>
<td>0</td>
</tr>
<tr>
<td>Messages In Quarantine</td>
<td>16,248</td>
</tr>
<tr>
<td>Kilobytes Used</td>
<td>387,143</td>
</tr>
<tr>
<td>Kilobytes In Quarantine</td>
<td>338,206</td>
</tr>
<tr>
<td>Kilobytes Free</td>
<td>39,458,745</td>
</tr>
</tbody>
</table>

supportrequest

Description

Send a message to IronPort Customer Care. 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.

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.

Table 3-61  supportrequest

mail3.example.com> supportrequest
Do you want to send the support request to supportrequest@ironport.com? [Y]>

Do you want to send the support request to additional recipient(s)? [N]>

Please enter the email address(es) to which you want to send the support request. Include anyone in your organization that should be included on future correspondence for this issue. Separate multiple addresses with commas.

[]> administrator@example.com, postmaster@example.com

Is this support request associated with an existing support ticket? [N]>

Please enter some comments describing your issue, providing as much detail as possible to aid in diagnosing any issues:

[]> Having DNS resolution issues with some domains

For future correspondence on this issue, please enter your email address:

[]> mail3@example.com

Please enter any additional contact information (e.g. phone number(s)):

[]> (650)555-1212 (office), (650)555-1212 (cell)

Generating configuration information; this will take about 10 seconds...

The support request information has been sent to supportrequest@ironport.com, administrator@example.com, postmaster@example.com.
Table 3-61 supportrequest

Do you want to print the support request to the screen? [N]> n

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

Table 3-62 suspend

mail3.example.com> suspend

Enter the number of seconds to wait before abruptly closing connections.
[30]> 45

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

mail3.example.com>

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

Table 3-63  suspenddel

mail3.example.com> suspenddel

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

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

Table 3-64  suspendlistener

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>

technsupport

Description

Allow IronPort customer service 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

Table 3-65  techsupport

mail3.example.com> techsupport

S/N XXXXXXXXXXXX-XXXXXXX
Service Access currently disabled.

Choose the operation you want to perform:

- ENABLE - Allow an IronPort customer service representative to remotely access your system to assist you in solving your technical issues.
- STATUS - Display the current techsupport status.

[]> enable

Enter a temporary password for customer care to use. This password may not be the same as your admin password. This password will not be able to be used to directly access your system.

[]> ********

Are you sure you want to enable service access? [N]> y

Service access has been ENABLED. Please provide your temporary password to your IronPort Customer Care representative.

S/N 00065BF3BA6D-9WFWC21
Service Access currently ENABLED (0 current service logins).

Choose the operation you want to perform:

- DISABLE - Prevent IronPort 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

Table 3-66  tlsverify

mail3.example.com> tlsverify

Enter the TLS domain to verify against:

[]> example.com

Enter the destination host to connect to. Append the port (example.com:26) if you are not connecting on port 25:

[example.com]> 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

Table 3-67  trace

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]> 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
Table 3-67  trace (Continued)

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
Table 3-67  \textit{trace} (Continued)

Message Processing:
- No Virtual Gateway\textsuperscript{tm} Assigned
- No Bounce Profile Assigned

Domain Masquerading/LDAP Processing:
- No Changes.

Processing filter ‘always\_deliver’:

\textbf{Evaluating Rule: rcpt-to == "@mail.qa"}
- Result = False

\textbf{Evaluating Rule: rcpt-to == "ironport.com"}
- Result = True

\textbf{Evaluating Rule: OR}
- Result = True

\textbf{Executing Action: deliver()}

Footer Stamping:
- Not Performed

Inbound Recipient Policy Processing: (matched on Management Upgrade policy)

Message going to: admin@ironport.com

\textbf{AntiSpam Evaluation:}
- Not Spam

\textbf{AntiVirus Evaluation:}
- Message Clean.
Table 3-67  trace (Continued)

- Elapsed Time = '0.000 sec'

VOF 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$0Management>
X-IronPort-AV: i="3.86,81,1096873200";
   d="scan'208"; a="0:sNHT0"
Subject: hello

This is a test message.

Run through another debug session? [N]>
tzupdate

Description

Update timezone rules

Usage

Commit: This command does not require a ‘commit’.
Cluster Management: This command is restricted to machine level.
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

    esx16-esa01.qa> 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.
Example

In the following example, the updateconfig command is used to configure the appliance to download update images from IronPort servers and download the list of available AsyncOS upgrades from a local server.

Table 3-68   updateconfig

mail3.example.com> **updateconfig**

<table>
<thead>
<tr>
<th>Service (images):</th>
<th>Update URL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophos Anti-Virus definitions</td>
<td><a href="http://downloads.ironport.com/av">http://downloads.ironport.com/av</a></td>
</tr>
<tr>
<td>IronPort Anti-Spam rules</td>
<td><a href="http://downloads.ironport.com/as">http://downloads.ironport.com/as</a></td>
</tr>
<tr>
<td>Intelligent Multi-Scan rules</td>
<td><a href="http://downloads.ironport.com/as">http://downloads.ironport.com/as</a></td>
</tr>
<tr>
<td>Virus Outbreak Filters rules</td>
<td><a href="http://downloads.ironport.com/as">http://downloads.ironport.com/as</a></td>
</tr>
<tr>
<td>Feature Key updates</td>
<td><a href="http://downloads.ironport.com/asyncos">http://downloads.ironport.com/asyncos</a></td>
</tr>
<tr>
<td>McAfee Anti-Virus definitions</td>
<td>IronPort Servers</td>
</tr>
<tr>
<td>PXE Engine Updates</td>
<td>IronPort Servers</td>
</tr>
<tr>
<td>IronPort AsyncOS upgrades</td>
<td>IronPort Servers</td>
</tr>
<tr>
<td>IMS Secondary Service rules</td>
<td>IronPort Servers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Service (list):</th>
<th>Update URL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>McAfee Anti-Virus definitions</td>
<td>IronPort Servers</td>
</tr>
<tr>
<td>PXE Engine Updates</td>
<td>IronPort Servers</td>
</tr>
<tr>
<td>IronPort AsyncOS upgrades</td>
<td>IronPort Servers</td>
</tr>
</tbody>
</table>

Update intervals: 5m, 5m
Proxy server: not enabled
HTTPS Proxy server: not enabled
Choose the operation you want to perform:

- SETUP - Edit update configuration.

[1]> setup

For the following services, please select where the system will download updates from:

<table>
<thead>
<tr>
<th>Service (images):</th>
<th>Update URL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophos Anti-Virus definitions</td>
<td><a href="http://downloads.ironport.com/av">http://downloads.ironport.com/av</a></td>
</tr>
<tr>
<td>IronPort Anti-Spam rules</td>
<td><a href="http://downloads.ironport.com/as">http://downloads.ironport.com/as</a></td>
</tr>
<tr>
<td>Intelligent Multi-Scan rules</td>
<td><a href="http://downloads.ironport.com/as">http://downloads.ironport.com/as</a></td>
</tr>
<tr>
<td>Virus Outbreak Filters rules</td>
<td><a href="http://downloads.ironport.com/as">http://downloads.ironport.com/as</a></td>
</tr>
<tr>
<td>Feature Key updates</td>
<td><a href="http://downloads.ironport.com/asyncos">http://downloads.ironport.com/asyncos</a></td>
</tr>
</tbody>
</table>

1. Use IronPort update servers (http://downloads.ironport.com)

2. Use own server

[1]> 1

For the following services, please select where the system will download updates from (images):

<table>
<thead>
<tr>
<th>Service (images):</th>
<th>Update URL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>McAfee Anti-Virus definitions</td>
<td>IronPort Servers</td>
</tr>
<tr>
<td>PXE Engine Updates</td>
<td>IronPort Servers</td>
</tr>
<tr>
<td>IronPort AsyncOS upgrades</td>
<td>IronPort Servers</td>
</tr>
</tbody>
</table>
For the following services, please select where the system will download updates from:

<table>
<thead>
<tr>
<th>Service (images):</th>
<th>Update URL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMS Secondary Service rules</td>
<td>IronPort Servers</td>
</tr>
</tbody>
</table>

1. Use IronPort update servers
2. Use own server

[1]> 1

For the following services, please select where the system will download the list of available updates from:

<table>
<thead>
<tr>
<th>Service (list):</th>
<th>Update URL:</th>
</tr>
</thead>
<tbody>
<tr>
<td>McAfee Anti-Virus definitions</td>
<td>IronPort Servers</td>
</tr>
<tr>
<td>PXE Engine Updates</td>
<td>IronPort Servers</td>
</tr>
<tr>
<td>IronPort AsyncOS upgrades</td>
<td>IronPort Servers</td>
</tr>
</tbody>
</table>

1. Use IronPort update servers
2. Use own update list

[1]> 2
Table 3-68  updateconfig

Enter the full HTTP URL of the update list using the format 
(http://optionalname:password@local.server:port/directory/manifest.xml). The 
default HTTP port is 80; you do not need to specify the port unless you wish 
to use a non-standard port. The optional username/password will be presented 
using HTTP BASIC_AUTH. Leave the entry blank to use the default server. 

[]> enter the full path to the update list

updatenow

Description

Requests an update to all system service components.

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 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

Table 3-69 version

mail3.example.com> version

Current Version
=============
Model: C60
Version: 4.5.0-316
Build Date: 2005-04-13
Install Date: 2005-04-14 13:32:20
Serial #: XXXXXXXXXXXX-XXXXXXX
BIOS: A15I
RAID: 2.7-1 3170
RAID Status: Okay
RAID Type: 10
mail3.example.com>

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.

Table 3-70 upgrade

mail3.example.com> upgrade

Upgrades available:
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.

---

**Table 3-70 upgrade (Continued)**

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
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 IronPort 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.

Table 3-71   *ldapconfig - New Server Profile*

<table>
<thead>
<tr>
<th>mail3.example.com&gt;</th>
<th>ldapconfig</th>
</tr>
</thead>
</table>

No LDAP server configurations.

Choose the operation you want to perform:

- NEW - Create a new server configuration.
- SETUP - Configure LDAP options.

[\]> new

Please create a name for this server configuration (Ex: "PublicLDAP"):  

[\]> PublicLDAP

Please enter the hostname:

[\]> 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
Table 3-71  ldapconfig - New Server Profile (Continued)

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
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.
- 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]>
```

Enter the LDAP query string:

```
[(proxyAddresses=smtp:{a})]
```

Do you want to test this query? [Y]>

```
Name: PublicLDAP
Hostname: myldapsrvr.example.com Port 3268
Server Type: Active Directory
Authentication Type: password
```
Table 3-71  ldapconfig - New Server Profile (Continued)

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.
- ISQUAUTH - 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})

Do you want to rewrite the Envelope Header? [N]> y

Enter the attribute which contains the full rfc822 email address for the recipients.

[>] mailRoutingAddress

Do you want to send the messages to an alternate mail host? [N]> y
Enter the attribute which contains the alternate mailhost for the recipients.

[]> mailForwardingAddress

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})]
```

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
MASQUERADE: PublicLDAP.masquerade

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.
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

Table 3-71  ldapconfig - New Server Profile (Continued)

- SMTPAUTH - Configure SMTP authentication.
- EXTERNALAUTH - Configure external authentication queries.
- ISQAUTH - Configure Spam Quarantine End-User Authentication Query.
- ISQALIAS - Configure Spam Quarantine Alias Consolidation Query.

[]> 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: PublicLDAP.ldapaccept
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.
Example - Configuring Global Settings

In the following example, the LDAP global settings are configured, including the certificate for TLS connections.

Table 3-72  ldapconfig - Configuring Global Settings

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]> setup

Choose the IP interface for LDAP traffic.

1. Auto
2. Management (10.92.145.175/24: esx16-esa01.qa)

[1]> 1
Table 3-72  ldapconfig - Configuring Global Settings

LDAP will determine the interface automatically.

Should group queries that fail to complete be silently treated as having negative results? [Y]>

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:

[1]> 1

No LDAP server configurations.

Choose the operation you want to perform:
- NEW - Create a new server configuration.
- SETUP - Configure LDAP options.

[]>

Idapflush

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**

*Table 3-73  ldapflush*

```
mail3.example.com> ldapflush
```

Are you sure you want to flush any cached LDAP results? [N]> y

Flushing cache

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

**Idaptest**

**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.

*Table 3-74  ldaptest*

```
mail3.example.com> ldaptest
```

Select which LDAP query to test:

1. PublicLDAPldapaccept

[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> ldapsearch

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:
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

mail3.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:

> testlist

Enter a description for the address list:

> A list for testing email addresses

Enter a comma separated list of addresses:

(e.g.: user@example.com, user@, @example.com, @.example.com, @[1.2.3.4])

> @sales.example.com, bob@example.com, joe@example.com

Address list "testlist" 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 IronPort appliance:

  aliasconfig export <filename>
Example

Table 3-75  aliasconfig

mail3.example.com> aliasconfig

No aliases in table.

Choose the operation you want to perform:
- NEW - Create a new entry.
- IMPORT - Import aliases from a file.

[>] new

How do you want your aliases to apply?

1. Globally
2. Add a new domain context

[1]> 2

Enter new domain context.
Separate multiple domains with commas.
Partial domains such as .example.com are allowed.

[>] example.com

Enter the alias(es) to match on.
Separate multiple aliases with commas.
Allowed aliases:
- "user" - This user in this domain context.
- "user@domain" - This email address.

[>] customercare
Enter address(es) for "customercare".
Separate multiple addresses with commas.

[>] 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]>

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.

[>] new

How do you want your aliases to apply?

1. Globally
2. Add a new domain context
3. example.com

[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 subdomains.

[]> admin

Enter address(es) for "admin".
Separate multiple addresses with commas.

[]> 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.
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.

There are currently 2 mappings defined.

Table 3-76 Arguments for Configuring Aliases

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;domain&gt;</td>
<td>The domain context in which an alias is applied. 'Global' specifies the Global Domain Context.</td>
</tr>
</tbody>
</table>
Table 3-76  Arguments for Configuring Aliases

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;alias&gt;</td>
<td>The name of the alias to configure</td>
</tr>
<tr>
<td></td>
<td>Aliases permitted at the Global Comain Context:</td>
</tr>
<tr>
<td></td>
<td>‘user@domain’ — This email address.</td>
</tr>
<tr>
<td></td>
<td>‘user’— This user for any domain.</td>
</tr>
<tr>
<td></td>
<td>‘@domain— All users in this domain.</td>
</tr>
<tr>
<td></td>
<td>‘@.partialdomain’— All users in this domain or any of its sub-domains.</td>
</tr>
<tr>
<td></td>
<td>Aliases permitted for specific domain contexts:</td>
</tr>
<tr>
<td></td>
<td>‘user’— This user in this domain context</td>
</tr>
<tr>
<td></td>
<td>‘user@domain’ — This email address</td>
</tr>
<tr>
<td>&lt;email_address&gt;</td>
<td>The email address that an alias maps to. A single alias can map to multiple</td>
</tr>
<tr>
<td></td>
<td>email addresses.</td>
</tr>
<tr>
<td>&lt;filename&gt;</td>
<td>The filename to use with importing/exporting the alias table.</td>
</tr>
</tbody>
</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:

Table 3-77  archivemessage

```
mail3.example.com> archivemessage

Enter the MID to archive.
```

[0]> 47
**Table 3-77 altsrchost (Continued)**

MID 47 has been saved in file oldmessage_47.mbox in the configuration

**altsrchost**

**Description**

Configure Virtual Gateway™ 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 (for example, the marketing campaign messaging system) is mapped to the AnotherPublicNet interface.

Finally, the altsrchost mappings are printed to confirm and the changes are committed.

**Table 3-78 altsrchost**

<table>
<thead>
<tr>
<th>mail3.example.com&gt; altsrchost</th>
</tr>
</thead>
</table>

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.

[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.

[]> @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.

[]> 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.

[]> 192.168.35.35

Which interface do you want to send messages for 192.168.35.35 from?
Table 3-78  \texttt{altsrchost} (Continued)

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.
**Table 3-78  altsrchost (Continued)**

- CLEAR - Remove all mappings.

[]>

mail3.example.com> commit

Please enter some comments describing your changes:

[]> 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.

**Table 3-79  **

<table>
<thead>
<tr>
<th>altsrchost</th>
<th>(Continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- CLEAR - Remove all mappings.</td>
</tr>
</tbody>
</table>

[]>

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

---

**Table 3-79  bounceconfig - Creating a Bounce Profile**

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):

```
Table 3-80  bounceconfig - Editing a Bounce Profile

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]>
```
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.

Table 3-80  `bounceconfig`- Editing a Bounce Profile

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.
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.

**Table 3-81 listenerconfig and bounceconfig - Applying a Bounce Profile to a Listener**

```
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
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.

[1]> bounceconfig

Please choose a bounce profile to apply:

1. Default
2. bouncepr1
3. New Profile

[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.

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.
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

Table 3-82  bouncerecipients - Bouncing Recipients by 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.
[1]> 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

Table 3-83  bouncerecipients - Bouncing Recipients by 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
Table 3-83  bouncerecipients - Bouncing Recipients by Address (Continued)

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

Table 3-84  bouncerecipients - bouncing All Recipients

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.

Table 3-85  bvconfig

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 23:21:01 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.

[>] key

Enter the key to tag outgoing mail with (when tagging is enabled in the Good Neighbor Table)

[>] basic_key
Table 3-85  bvconfig

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:
**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 IronPort 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

Table 3-86  deleterecipients - Delete Messages 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

Table 3-87  deleterecipients -Delete Messages 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
Delete All

Table 3-87 deleterecipients - Delete Messages by Envelope From Address (Continued)

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.

Table 3-88 deleterecipients - Delete all Message from a Queue

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.

| Table 3-89 | deliveryconfig |

`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]> 1`

Enable "Possible Delivery" (recommended)? [Y]> y

Please enter the default system wide maximum outbound message delivery

concurrency

`[10000]> 9000`

`mail3.example.com>`
**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

```plaintext
<table>
<thead>
<tr>
<th>Table 3-90</th>
<th>destconfig Subcommands</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syntax</td>
<td>Description</td>
</tr>
<tr>
<td>SETUP</td>
<td>Change global settings.</td>
</tr>
<tr>
<td>NEW</td>
<td>Add new limits for a domain.</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 3-92  Example Destination Control Table Entries

<table>
<thead>
<tr>
<th>Domain</th>
<th>Conn. Limit</th>
<th>Rcnt. 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>
<tr>
<td>Unlisted domains get their own set of 500 connections with unlimited rcpts/hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(default)</td>
<td>500</td>
<td>None</td>
<td>1</td>
<td>MXIP</td>
</tr>
<tr>
<td>Mail gateways at unlisted domains get up to 500 connections, with unlimited rcpts/hr</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>partner.com</td>
<td>10</td>
<td>500</td>
<td>60</td>
<td>Domain</td>
</tr>
<tr>
<td>All gateways at partner.com will share 10 connections, with 500 rcpts/minute maximum</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>101.202.101.2</td>
<td>500</td>
<td>None</td>
<td>0</td>
<td>MXIP</td>
</tr>
<tr>
<td>Specifying an IP address</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**Table 3-91  `destconfig` Subcommands (Continued)**

| Syntax | Description
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<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>
**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).
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 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.

Table 3-93  destconfig example: Configuring the Destination Configuration Table

```
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.
```
Table 3-93  destconfig example: Configuring the Destination Configuration Table

[]> list

1

<table>
<thead>
<tr>
<th>Domain</th>
<th>Rate</th>
<th>Bounce</th>
<th>Bounce</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Default)</td>
<td>On</td>
<td>Off</td>
<td>Off</td>
</tr>
</tbody>
</table>

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".

[5]> 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
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 161) configured to be used for all email delivery to the domain `newpartner.com`.

| Table 3-94 | destconfig example: Configuring Bounce Profile and TLS Settings |

```
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.
Table 3-94  

**destconfig example: Configuring Bounce Profile and TLS Settings**

- 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>Rate</th>
<th>Bounce</th>
<th>Bounce</th>
</tr>
</thead>
</table>

Table 3-94  destconfig example: Configuring Bounce Profile and TLS Settings
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.

[]>
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 IronPort 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:

Table 3-95  destconfig example: Inbound “Shock Absorber”

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.
- CLEAR - Remove all entries.

[]> 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 1 minutes 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:

[>] 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.

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.

[] > 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:

[1]> 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

Table 3-97  hostrate

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</th>
<th>CrtCncOut</th>
<th>ActvRcp</th>
<th>ActvRcp</th>
<th>DlvRcp</th>
<th>HrdBncRcp</th>
<th>SftBncEvt</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Status</td>
<td>Delta</td>
<td>Delta</td>
<td>Delta</td>
<td>Delta</td>
<td>Delta</td>
</tr>
<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

Table 3-98  **hoststatus**

```
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
```
Table 3-98  hoststatus (Continued)

<table>
<thead>
<tr>
<th>Attempted Recipients</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connections</td>
<td></td>
</tr>
<tr>
<td>Current Outbound</td>
<td>0</td>
</tr>
<tr>
<td>Connections</td>
<td></td>
</tr>
<tr>
<td>Pending Outbound</td>
<td>0</td>
</tr>
<tr>
<td>Connections</td>
<td></td>
</tr>
<tr>
<td>Oldest Message</td>
<td>No Messages</td>
</tr>
<tr>
<td>Last Activity</td>
<td>Fri Aug 8 11:04:24 2003</td>
</tr>
<tr>
<td>Ordered IP addresses:</td>
<td>(expiring at Fri Aug 8 11:34:24 2003)</td>
</tr>
<tr>
<td>Preference  IPs</td>
<td></td>
</tr>
<tr>
<td>15 64.12.137.121</td>
<td>64.12.138.89 64.12.138.120</td>
</tr>
<tr>
<td>15 64.12.137.89</td>
<td>64.12.138.152 152.163.224.122</td>
</tr>
<tr>
<td>15 64.12.137.184</td>
<td>64.12.137.89 64.12.136.57</td>
</tr>
<tr>
<td>15 64.12.138.57</td>
<td>64.12.136.153 205.188.156.122</td>
</tr>
<tr>
<td>15 64.12.138.57</td>
<td>64.12.137.152 64.12.136.89</td>
</tr>
<tr>
<td>15 64.12.138.57</td>
<td>205.188.156.154 64.12.138.152</td>
</tr>
<tr>
<td>15 64.12.136.121</td>
<td>152.163.224.26 64.12.137.184</td>
</tr>
<tr>
<td>15 64.12.138.120</td>
<td>64.12.137.152 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)
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:

Table 3-99 oldmessage

mail3.example.com> oldmessage

MID 9: 1 hour 5 mins 35 secs old
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

**Table 3-100**  rate

```
mail3.example.com> rate

Enter the number of seconds between displays.

[10]> 1

Hit Ctrl-C to return to the main prompt.
```

<table>
<thead>
<tr>
<th>Time</th>
<th>Connections</th>
<th>Recipients</th>
<th>Recipients</th>
<th>Queue</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In  Out</td>
<td>Received</td>
<td>Delta</td>
<td>Completed</td>
</tr>
<tr>
<td>23:37:13</td>
<td>10 2</td>
<td>41708833</td>
<td>0</td>
<td>40842686</td>
</tr>
<tr>
<td>23:37:14</td>
<td>8 2</td>
<td>41708841</td>
<td>8</td>
<td>40842692</td>
</tr>
<tr>
<td>23:37:15</td>
<td>9 2</td>
<td>41708848</td>
<td>7</td>
<td>40842700</td>
</tr>
<tr>
<td>23:37:16</td>
<td>7 3</td>
<td>41708852</td>
<td>4</td>
<td>40842705</td>
</tr>
<tr>
<td>23:37:17</td>
<td>5 3</td>
<td>41708858</td>
<td>6</td>
<td>40842711</td>
</tr>
<tr>
<td>23:37:18</td>
<td>9 3</td>
<td>41708871</td>
<td>13</td>
<td>40842722</td>
</tr>
<tr>
<td>23:37:19</td>
<td>7 3</td>
<td>41708881</td>
<td>10</td>
<td>40842734</td>
</tr>
<tr>
<td>23:37:21</td>
<td>11 3</td>
<td>41708893</td>
<td>12</td>
<td>40842744</td>
</tr>
</tbody>
</table>

```

**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**

```
Table 3-101   resetcounters

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**

*Table 3-102  removemessage*

example.com> removemessage 1

MID 1: 19 secs old

Received: from example2.com ([172.16.0.102])
   by test02.com with SMTP; 01 Mar 2007 19:50:41 -0800
From: user123@test02.com
To: 9526@example.com
Subject: Testing
Message-Id: <20070302035041.67424.53212@test02.com>

Remove this message? [N]> y

**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

Table 3-103  showmessage

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.

showrecipients

Description

Show messages from the queue by recipient host, Envelope From address, or all messages.

Usage

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

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>
</tbody>
</table>
```
status

The status command is used to display the system status of your IronPort 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

**Table 3-104  status**

example.mail3.com> status

Enter "status detail" for more information.

<table>
<thead>
<tr>
<th>Status as of:</th>
<th>Tue Aug 02 14:03:53 2005 PDT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up since:</td>
<td>Tue Aug 02 10:27:22 2005 PDT (3h 36m 31s)</td>
</tr>
<tr>
<td>Last counter reset:</td>
<td>Tue Aug 02 10:24:51 2005 PDT</td>
</tr>
<tr>
<td>System status:</td>
<td>Online</td>
</tr>
<tr>
<td>Oldest Message:</td>
<td>No Messages</td>
</tr>
<tr>
<td>Feature - IronPort Anti-Spam:</td>
<td>25 days</td>
</tr>
<tr>
<td>Feature - Receiving:</td>
<td>25 days</td>
</tr>
<tr>
<td>Feature - Sophos:</td>
<td>25 days</td>
</tr>
<tr>
<td>Feature - Virus Outbreak Filters:</td>
<td>25 days</td>
</tr>
<tr>
<td>Feature - Central Mgmt:</td>
<td>29 days</td>
</tr>
</tbody>
</table>

Counters:

<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>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Recipients Received</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Rejection</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rejected Recipients</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Dropped Messages</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Queue</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft Bounced Events</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Completion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completed Recipients</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Current IDs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**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

Table 3-105  tophosts

mail3.example.com> tophosts

Sort results by:

1. Active Recipients
2. Connections Out
3. Delivered Recipients
4. Soft Bounced Events
5. Hard Bounced Recipients

[1]> 1


Active Conn. Deliv. Soft Hard

# Recipient Host Recip Out Recip. Bounced Bounced

1  aol.com 365 10 255 21 8
2  hotmail.com 290 7 198 28 13
3  yahoo.com 134 6 123 11 19
4  excite.com 98 3 84 9 4
5  msn.com 84 2 76 33 29

mail3.example.com>

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

Table 3-106  topin

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>
</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.

```
table 3-106  topin (Continued)

<table>
<thead>
<tr>
<th></th>
<th>mail.remotedomain19.com</th>
<th>172.16.0.20</th>
<th>Incoming</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>mail.remotedomain20.com</td>
<td>172.16.0.21</td>
<td>Incoming</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3-107  unsubscribe

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
Table 3-107 unsubscribe (Continued)

Email Address 'user@example.net' added.

Global Unsubscribe is enabled.

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.
Table 3-107 unsubscribe (Continued)

- 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

Do you want to save the current configuration for rollback? [Y]> n

Changes committed: Fri May 23 11:42:12 2014 GMT

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

Table 3-108  workqueue - Manually Pausing the Work Queue

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:

Table 3-109  workqueue - Resuming a Paused Work Queue

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`
- `netstat`
- `nslookup`
- `ping`
- `routeconfig`
- `setgateway`
- `sethostname`
- `smtproutes`
- `sslconfig`
- `telnet`
- `traceroute`

**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 of Editing Media Settings

Table 3-110  etherconfig -Editing Media Settings

mail3.example.com> etherconfig

Choose the operation you want to perform:

- MEDIA - View and edit ethernet media settings.
- PAIRING - View and configure NIC Pairing.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.

[>] media

Ethernet interfaces:

1. Data 1 (Autoselect: <100baseTX full-duplex>) 00:06:5b:f3:ba:6d
2. Data 2 (Autoselect: <100baseTX full-duplex>) 00:06:5b:f3:ba:6e
3. Management (Autoselect: <100baseTX full-duplex>) 00:02:b3:c7:a2:da

Choose the operation you want to perform:

- EDIT - Edit an ethernet interface.

[>] edit

Enter the name or number of the ethernet interface you wish to edit.

[>] 2

Please choose the Ethernet media options for the Data 2 interface.

1. Autoselect
2. 10baseT/UTP half-duplex
3. 10baseT/UTP full-duplex
4. 100baseTX half-duplex
5. 100baseTX full-duplex
Ethernet interfaces:

1. Data 1 (Autoselect: <100baseTX full-duplex>) 00:06:5b:f3:ba:6d

2. Data 2 (100baseTX full-duplex: <100baseTX full-duplex>)
   00:06:5b:f3:ba:6e

3. Management (Autoselect: <100baseTX full-duplex>) 00:02:b3:c7:a2:da

Choose the operation you want to perform:

- EDIT - Edit an ethernet interface.

Choose the operation you want to perform:

- MEDIA - View and edit ethernet media settings.
- PAIRING - View and configure NIC Pairing.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.

Table 3-110  
etherconfig (Continued)-Editing Media Settings  (Continued)

6. 1000baseTX half-duplex
7. 1000baseTX full-duplex
Enabling NIC Pairing via the etherconfig Command

Table 3-111  etherconfig - Enabling NIC Pairing

mail3.example.com> etherconfig

Choose the operation you want to perform:
- MEDIA - View and edit ethernet media settings.
- PAIRING - View and configure NIC Pairing.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.

[>] pairing

Paired interfaces:

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

[>] new

Please enter a name for this pair (Ex: "Pair 1"): 

[>] Pair 1

1. Data 1
2. Data 2

Enter the name or number of the primary ethernet interface you wish bind to.

[>] 1

Paired interfaces:
1. Pair 1:
   Primary (Data 1) Active, Link is up
**Using the failover Subcommand for NIC Pairing**

In this example, a manual failover is issued, forcing the Data 2 interface to become the primary interface. Note that you must issue the `status` sub-command to see the change in the CLI.

**Table 3-112  etherconfig - Issuing a Manual Failover Command**

```
mail3.example.com> etherconfig
```

Choose the operation you want to perform:
- MEDIA - View and edit ethernet media settings.
- PAIRING - View and configure NIC Pairing.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.

```
[]> pairing
```

Paired interfaces:
1. Pair 1:
   - Primary (Data 1) Active, Link is up
   - Backup (Data 2) Standby, Link is up

Choose the operation you want to perform:
- FAILOVER - Manually failover to other port.
- DELETE - Delete a pairing.
Paired interfaces:

1. Pair 1:
   Primary (Data 1) Active, Link is up
   Backup (Data 2) Standby, Link is up

Choose the operation you want to perform:
- FAILOVER - Manually failover to other port.
- DELETE - Delete a pairing.
- STATUS - Refresh status.

[]> status

Paired interfaces:

1. Pair 1:
   Primary (Data 1) Standby, Link is up
   Backup (Data 2) Active, Link is up

Choose the operation you want to perform:
- FAILOVER - Manually failover to other port.
- DELETE - Delete a pairing.
- STATUS - Refresh status.

[]>

Choose the operation you want to perform:
- MEDIA - View and edit ethernet media settings.
- PAIRING - View and configure NIC Pairing.
- VLAN - View and configure VLANs.
Creating a New VLAN via the etherconfig Command

In this example, two VLANs are created (named VLAN 31 and VLAN 34) on the Data 1 port:

```plaintext
mail3.example.com> etherconfig

Choose the operation you want to perform:
- MEDIA - View and edit ethernet media settings.
- PAIRING - View and configure NIC Pairing.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.

[]> vlan

VLAN interfaces:

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

[]> new

VLAN tag ID for the interface (Ex: "34"): 

[]> 34

Enter the name or number of the ethernet interface you wish bind to:
1. Data 1
2. Data 2
3. Management

[1]> 1
```
Table 3-113  etherconfig - Creating a New VLAN (Continued)

VLAN interfaces:
1. VLAN 34 (Data 1)

Choose the operation you want to perform:
- NEW - Create a new VLAN.
- EDIT - Edit a VLAN.
- DELETE - Delete a VLAN.

[]> new

VLAN tag ID for the interface (Ex: "34"): 

[]> 31

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 31 (Data 1)
2. VLAN 34 (Data 1)

Choose the operation you want to perform:
- NEW - Create a new VLAN.
- EDIT - Edit a VLAN.
- DELETE - Delete a VLAN.

[]>
Table 3-13  etherconfig - Creating a New VLAN (Continued)

Choose the operation you want to perform:

- MEDIA - View and edit ethernet media settings.
- PAIRING - View and configure NIC Pairing.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.

[1]>

Enabling the Loopback Interface via the etherconfig Command

Once enabled, the loopback interface is treated like any other interface (e.g. Data 1):

Table 3-14  etherconfig Enabling the Loopback Interface

mail3.example.com> etherconfig

Choose the operation you want to perform:

- MEDIA - View and edit ethernet media settings.
- PAIRING - View and configure NIC Pairing.
- VLAN - View and configure VLANs.
- LOOPBACK - View and configure Loopback.

[1]> loopback

Currently configured loopback interface:

Choose the operation you want to perform:

- ENABLE - Enable Loopback Interface.

[1]> enable

Currently configured loopback interface:

1. Loopback
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>

   <ip address>
   <ethernet interface>
   <hostname>
- --ip=IPv4 Address/Netmask
- --ip6=IPv6 Address/Prefix Length

[---ftp[=<port>]] (Note: only available on IPv4)
[---telnet[=<port>]]
[---ssh[=<port>]]
[---http[=<port>]]
[---https[=<port>]]
[---euq_http[=<port>]]
[---euq_https][=<port>]

- Deleting an interface

interfaceconfig delete <name>
Example: Configuring an Interface

Table 3-115  interfaceconfig Configuring an Interface

mail3.example.com> interfaceconfig

Currently configured interfaces:

1. Data 1 (192.168.1.1/24 on Data1: mail3.example.com)
2. Data 2 (192.168.2.1/24 on Data2: mail3.example.com)
3. Management (192.168.42.42/24 on Management: 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.

[]> edit

Enter the number of the interface you wish to edit.

[]> 1

IP interface name (Ex: "InternalNet"): 

[Data 1]>

Would you like to configure an IPv4 address for this interface (y/n)?

[Y]>

IPV4 Address (Ex: 192.168.1.2 ): 

[192.168.1.1]>

Netmask (Ex: "24", "255.255.255.0" or "0xffffffff00"): 


Would you like to configure an IPv6 address for this interface (y/n)? [N]>

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

Hostname:
[mail3.example.com]>

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

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

Do you want to enable FTP on this interface? [N]>

Do you want to enable HTTP on this interface? [Y] > y

Which port do you want to use for HTTP?
[80] > 80

Do you want to enable HTTPS on this interface? [Y] > y

Which port do you want to use for HTTPS?
Do you want to enable Spam Quarantine HTTP on this interface? [N]

Do you want to enable Spam Quarantine HTTPS on this interface? [N]

Both HTTP and HTTPS are enabled for this interface, should HTTP requests redirect to the secure service? [Y]

Currently configured interfaces:
1. Data 1 (192.168.1.1/24 on Data 1: mail3.example.com)
2. Data 2 (192.168.2.1/24 on Data 2: mail3.example.com)
3. Management (192.168.42.42/24 on Management: 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.

mail3.example.com> commit

Please enter some comments describing your changes:

mail3.example.com> enabled HTTP, HTTPS for Data 1

Do you want to save the current configuration for rollback? [Y]> n

Changes committed: Fri May 23 11:42:12 2014 GMT
**Example: Changing the IronPort Spam Quarantine URL**

The following example shows a change in the IronPort Spam Quarantine URL.

**Table 3-116  Changing the IronPort Spam Quarantine URL**

```
mail3.example.com]>interfaceconfig
```

Currently configured interfaces:

1. Data 1 (192.168.1.1/24 on Data1: mail3.example.com)
2. Data 2 (192.168.2.1/24 on Data2: mail3.example.com)
3. Management (192.168.42.42/24 on Management: 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.

```
[]]> edit
```

Enter the number of the interface you wish to edit.

```
[]]> 3
```

```
IP interface name (Ex: "InternalNet"): [Management]>
```

```
[ ... ]
```

Do you want to enable IronPort Spam Quarantine HTTP on this interface?

```
[Y]>  
```

Which port do you want to use for IronPort Spam Quarantine HTTP?

```
[82]>  
```
Table 3-116  Changing the IronPort Spam Quarantine URL  (Continued)

Do you want to enable IronPort Spam Quarantine HTTPS on this interface? [Y]>

Which port do you want to use for IronPort Spam Quarantine HTTPS? [81]>

You have not entered an HTTPS certificate. To assure privacy, run "certconfig" first.
You may use the demo, but this will not be secure.
Do you really wish to use a demo certificate? [Y]>

Both HTTP and HTTPS are enabled for this interface, should HTTP requests redirect to the secure service? [Y]>

Both IronPort Spam Quarantine HTTP and IronPort Spam Quarantine HTTPS are enabled for this interface, should IronPort Spam Quarantine HTTP requests redirect to the secure service? [Y]>

Do you want Management as the default interface for IronPort Spam Quarantine? [Y]>

Do you want to use a custom base URL in your IronPort Spam Quarantine email notifications? [N]>y

Enter the custom base URL (Ex: "http://isq.example.url:81/")

[]> http://ISQ.example.com:82/

You have edited the interface you are currently logged into. Are you sure you want to change it? [Y]>y


**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>
<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>
<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>
netstat

Description

Use the netstat command to display 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

Table 3-118  netstat

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

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     -    -    -

example.com>

ing

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

Table 3-119 ping

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.

[]> 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
**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, IronPort 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 `smtproutes` 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.

--- 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

Table 3-119 ping (Continued)
Creating a static route:

```
routeconfig new 4|6 <name> <destination_address> <gateway_ip>
```

### Table 3-120 routeconfig Arguments

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>`4</td>
<td>6`</td>
</tr>
<tr>
<td><code>name</code></td>
<td>The name of the route.</td>
</tr>
<tr>
<td><code>destination_address</code></td>
<td>The IP or CIDR address to match on for outgoing IP traffic.</td>
</tr>
<tr>
<td><code>gateway_ip</code></td>
<td>The IP address to send this traffic to.</td>
</tr>
</tbody>
</table>

Editing a static route:

```
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.
[1]> new

Please create a name for the route:
[1]> EuropeNet

Please enter the destination IPv4 address to match on.
CIDR addresses such as 192.168.42.0/24 are also allowed.
[1]> 192.168.12.0/24

Please enter the gateway IP address for traffic to 192.168.12.0/24:

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

[1]> 2

Currently configured routes:

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

[]> new

Please create a name for the route:

[]> 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:

[>] 2620:101:2004:4202::23

Currently configured routes:
   2620:101:2004:4202::23

Choose the operation you want to perform:
- NEW - Create a new route.
- EDIT - Modify a route.
- DELETE - Remove a route.
- CLEAR - Clear all entries.

[>]

**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

Table 3-121  setgateway

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 IronPort 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

Table 3-122  sethostname

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:

Table 3-123

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
  
  ```
  smtproutes new <source> <destination> [destination] [destination] [...]
  ```

- Deleting an existing SMTP route
  
  ```
  smtproutes delete <source>
  ```

- Clear a listing of SMTP routes
  
  ```
  smtproutes clear
  ```

- Print a listing of SMTP routes
  
  ```
  smtproutes print
  ```

- Import a listing of SMTP routes
  
  ```
  smtproutes import <filenames>
  ```

- Export a listing of SMTP routes
  
  ```
  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.

(Note that you may have constructed the same mapping during the `systemsetup` command when you configured the InboundMail public listener.)

```plaintext
Table 3-124 smtproutes

mail3.example.com> smtproutes

There are no routes configured.

Choose the operation you want to perform:
```
Chapter

[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.

[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.

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.
Use `smtproutes -> EDIT` to modify the domain for an SMTP route.

**sslconfig**

**Description**

Configure SSL 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

mail3.example.com> sslconfig

sslconfig settings:

GUI HTTPS method: sslv3tlsv1
GUI HTTPS ciphers: RC4-SHA:RC4-MD5:ALL
Inbound SMTP method: sslv3tlsv1
Inbound SMTP ciphers: RC4-SHA:RC4-MD5:ALL
Outbound SMTP method: sslv3tlsv1
Outbound SMTP ciphers: RC4-SHA:RC4-MD5:ALL

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.

[5]> gui

Enter the GUI HTTPS ssl method you want to use.

1. SSL v2.
2. SSL v3
3. TLS v1
4. SSL v2 and v3
5. SSL v3 and TLS v1
6. SSL v2, v3 and TLS v1

[5]> 6

Enter the GUI HTTPS ssl cipher you want to use.

[RC4-SHA:RC4-MD5:ALL]>
sslconfig settings:

GUI HTTPS method: sslv2sslv3tlsv1
GUI HTTPS ciphers: RC4-SHA:RC4-MD5:ALL
Inbound SMTP method: sslv3tlsv1
Inbound SMTP ciphers: RC4-SHA:RC4-MD5:ALL
Outbound SMTP method: sslv3tlsv1
Outbound SMTP ciphers: RC4-SHA:RC4-MD5:ALL

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.

[5]> inbound

Enter the inbound SMTP ssl method you want to use.

1. SSL v2.
2. SSL v3
3. TLS v1
4. SSL v2 and v3
5. SSL v3 and TLS v1
6. SSL v2, v3 and TLS v1

[5]> 6

Enter the inbound SMTP ssl cipher you want to use.

[RC4-SHA:RC4-MD5:ALL]>
GUI HTTPS method: sslv2sslv3tlsv1
GUI HTTPS ciphers: RC4-SHA:RC4-MD5:ALL
Inbound SMTP method: sslv2sslv3tlsv1
Inbound SMTP ciphers: RC4-SHA:RC4-MD5:ALL
Outbound SMTP method: sslv3tlsv1
Outbound SMTP ciphers: RC4-SHA:RC4-MD5:ALL

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.

[{}>

**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

Table 3-125  telnet

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.

[]> 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 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**

*Table 3-126 traceroutes*

```plaintext
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.

[]> 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>
```

**Outbreak Filters**

This section contains the following CLI commands:

- `outbreakconfig`
- `outbreakflush`
- `outbreakstatus`
outbreakconfig

Description

Use the outbreakconfig command to configure the Outbreak Filters feature via the CLI. Configuration includes enabling the Outbreak Filters feature, setting a threshold value, and selecting whether to receive email alerts for the Outbreak Filters features.

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

Table 3-127  vofconfig

mail3.example.com> vofconfig

VOF: enabled

Choose the operation you want to perform:
- SETUP - Change VOF settings.

[>] setup

Do you want to enable the Virus Outbreak Filters? [Y]> y

Virus Outbreak Filters enabled. The current threshold is 4.

Suspicious messages with a threat level that meet or exceed this threshold will be quarantined.

Enter your threshold value. This is a number between 1 and 5, where 1 is a very low tolerance for risk, and 5 is extremely high:

[4]> 2

Virus Outbreak Filters enabled. The current threshold is 2.

Suspicious messages with a threat level that meet or exceed this threshold will be quarantined.

VOF Alerts are sent when filetypes 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 VOF alerts? [Y]> y
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

Table 3-128  vofflush

mail3.example.com> outbreakflush

Cached Outbreak Rules have been cleared.

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

Table 3-129  outbreakstatus

mail3.example.com> vofstatus

Virus Outbreak Filters: enabled

<table>
<thead>
<tr>
<th>Component</th>
<th>Last Update</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Virus Outbreak Rules</td>
<td>Tue May 03 11:17:42</td>
<td>20050422_231148</td>
</tr>
<tr>
<td>CASE - Core</td>
<td>Never</td>
<td>1.0.0-017</td>
</tr>
<tr>
<td>CASE - Tools</td>
<td>Tue May 03 13:33:30</td>
<td>1.0.0-013</td>
</tr>
</tbody>
</table>

Last download attempt made on Wed May 04 10:35:35

Threat Outbreak  Outbreak
Level  Rule Name  Rule Description

<table>
<thead>
<tr>
<th>Level</th>
<th>Rule Name</th>
<th>Rule Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>OUTBREAK_0002187_03</td>
<td>A reported a MyDoom.BB outbreak.</td>
</tr>
<tr>
<td>5</td>
<td>OUTBREAK_0005678_00</td>
<td>This configuration file was generated by...</td>
</tr>
<tr>
<td>3</td>
<td>OUTBREAK_0000578_00</td>
<td>This virus is distributed in pictures of...</td>
</tr>
</tbody>
</table>

Virus Outbreak Filter Rules with higher threat levels pose greater risks. (5 = highest threat, 1 = lowest threat)

Last update: Tue May 03 11:17:46 2005

Current Virus Outbreak Filters threshold: 3 (use "vofconfig" to change)

mail3.example.com>
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.
- **Batch Command**: This command does not support a batch format.

**Example**

```plaintext
Table 3-130 outbreakupdate

elroy.run> outbreakupdate

Requesting check for new CASE definitions
```

**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.

<table>
<thead>
<tr>
<th>Table 3-131</th>
<th><code>dictionaryconfig</code> - Creating a Dictionary</th>
</tr>
</thead>
</table>

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.
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.

```
[1]> delete
```

Enter the number of the dictionary you want to delete:

1. HRWords

```
[1]> 1
```

Content dictionary "HRWords" deleted.

No content dictionaries have been defined.

Choose the operation you want to perform:

- NEW - Create a new content dictionary.

```
[1]> new
```

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.

```
Table 3-131  dictionaryconfig - Creating a Dictionary 1 (Continued)

- EDIT - Modify a content dictionary.
- DELETE - Remove a content dictionary.
- RENAME - Change the name of a content dictionary.

[1]> delete
```

```
Table 3-132  dictionaryconfig - Creating a Dictionary 2

mail3.example.com> dictionaryconfig
```

No content dictionaries have been defined.

Choose the operation you want to perform:

- NEW - Create a new content dictionary.

```
[1]> new
```

```
[1]> secret_words
```
Table 3-132  dictionaryconfig - Creating a Dictionary 2 (Continued)

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.

[ ]> 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
**Table 3-132 dictionaryconfig - Creating a Dictionary 2 (Continued)**

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)  

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`.

Table 3-133  `dictionaryconfig - Importing Dictionaries`

Table 3-132  `dictionaryconfig - Creating a Dictionary 2 (Continued)`

No content dictionaries have been defined.

Choose the operation you want to perform:

- NEW - Create a new content dictionary.
Table 3-133 dictionaryconfig - Importing Dictionaries (Continued)

[]> 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:
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`.

```
Table 3-134 dictionaryconfig - Exporting a Dictionary

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.

[]> 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.

[]> export

Enter a name for the exported file:

[]> secret_words_export.txt

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.

[]> edit

Enter the number of the dictionary you want to edit:

1. secret_words

[]> 1
### exceptionconfig

#### Description

Use the `exceptionconfig` command in the CLI to create the domain exception table. In this example, the email address “admin@zzzaaazzz.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.

---

**Table 3-134 exceptionconfig - Exporting a Dictionary (Continued)**

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.

```shell
[]> export

Enter a name for the exported file:

[]> secret_words_export.txt
```
Example

### Table 3-135 exceptionconfig

mail3.example.com> exceptionconfig

Choose the operation you want to perform:
- **NEW** - Create a new domain exception table entry

[> new

Enter a domain, sub-domain, user, or email address for which you wish to provide an exception:

[> 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:

[> admin@zzzaaaazzz.com

Choose a policy for this domain exception:
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`.

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]> 1

Table 3-135  exceptionconfig (Continued)

1. Allow
2. Reject

[1]>
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.

**Table 3-136 filters**

```
mail3.example.com> filters
```

Choose the operation you want to perform:

- **NEW** - Create a new filter.
- **IMPORT** - Import a filter script from a file.

```
[1]> 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.
Table 3-136  filters (Continued)

[]> new

Enter filter script. Enter '.' on its own line to end.

no_mp3s:

    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.
- 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.
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.

Example

In this example, the policyconfig -> edit -> antispm subcommand is used to edit the IronPort 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 IronPort 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.

Unwanted marketing messages are delivered with the text [MARKETING] prepended to the subject line.

Finally, the changes are committed.

See Table 3-143 on page 3-308 to see an example of how DLP policies are enabled on an outgoing mail policy.

Table 3-137 policyconfig - Editing the Default Anti-Spam Settings

```
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: Content Filter: VOF:
----- ------------- ----------- --------------- -------
DEFAULT IronPort McAfee 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
[1]> edit
Table 3-137 policyconfig - Editing the Default Anti-Spam Settings

<table>
<thead>
<tr>
<th>Name:</th>
<th>Anti-Spam:</th>
<th>Anti-Virus:</th>
<th>Content Filter:</th>
<th>VOF:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>IronPort</td>
<td>McAfee</td>
<td>Off</td>
<td>Enabled</td>
</tr>
</tbody>
</table>

Enter the name or number of the entry you wish to edit:

1>

Policy Summaries:

- **Anti-Spam**: IronPort - Deliver, Prepend "[SPAM] " to Subject
- **Suspect-Spam**: IronPort - Deliver, Prepend "[SUSPECTED SPAM] " to Subject
- **Anti-Virus**: McAfee - Scan and Clean
- **Content Filters**: Off (No content filters have been created)
- **Virus Outbreak Filters**: Enabled. No bypass extensions.

Choose the operation you want to perform:

- **ANTISPAM** - Modify Anti-Spam policy
- **ANTIVIRUS** - Modify Anti-Virus policy
- **VOF** - Modify Virus Outbreak Filters policy

1> antispam

Choose the operation you want to perform:

- **EDIT** - Edit Anti-Spam policy
- **DISABLE** - Disable Anti-Spam policy (Disables all policy-related actions)

1> 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
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:

[1]> X-quarantined

Enter the text for the content of the header:

[1]> true

Marketing email is normally legitimate email but sometimes undesirable. Do you want to enable special treatment of marketing messages? [N]> y

The following configuration options apply to messages identified as marketing messages:
Do you want to archive messages identified as marketing messages? [N]>  

1. PREPEND  
2. APPEND  
3. NONE  

Do you want to add text to the subject of messages identified as marketing messages? [1]>  

What text do you want to prepend to the subject?  

[[MARKETING] ]> [MARKETING]  

Do you want marketing messages sent to an external quarantine or alternate destination host? [N]>  

Do you want to add a custom header to messages identified as marketing messages? [N]>  

Do you want marketing messages sent to an alternate envelope recipient? [N]>  

Anti-Spam configuration complete
Policy Summaries:

Anti-Spam: IronPort - Drop

Suspect-Spam: IronPort - Quarantine - Archiving copies of the original message.

Marketing-Messages: IronPort - Deliver, Prepend "[MARKETING]" to Subject

Anti-Virus: McAfee - Scan and Clean

Content Filters: Off (No content filters have been created)

Virus Outbreak Filters: Enabled. No bypass extensions.

Choose the operation you want to perform:

- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- VOF - Modify Virus Outbreak Filters policy

Table 3-137  policyconfig - Editing the Default Anti-Spam Settings

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Content Filter</th>
<th>VOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>IronPort</td>
<td>McAfee</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
- PRINT - Print all policies
- FILTERS - Edit content filters

[]>
Then, use the new subcommand to add two new policies for different sets of users — the sales organization and the engineering organization — and configure different email security settings for each. In the CLI, you can configure different settings than the default as you create the policy.

First, create the policy for the sales team, specifying a more aggressive anti-spam setting:

```
Table 3-137  policyconfig - Editing the Default Anti-Spam Settings

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
```

Then, use the new subcommand to add two new policies for different sets of users — the sales organization and the engineering organization — and configure different email security settings for each. In the CLI, you can configure different settings than the default as you create the policy.

First, create the policy for the sales team, specifying a more aggressive anti-spam setting:

```
Table 3-138  policyconfig - Creating a Policy for the Sales Team

Incoming Mail Policy Configuration

<table>
<thead>
<tr>
<th>Name:</th>
<th>Anti-Spam:</th>
<th>Anti-Virus:</th>
<th>Content Filter:</th>
<th>VOF:</th>
</tr>
</thead>
<tbody>
<tr>
<td>DEFAULT</td>
<td>IronPort</td>
<td>McAfee</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
- PRINT - Print all policies
- FILTERS - Edit content filters

[>] new

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
Enter a member for this policy:

[>] 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
Table 3-138  

policyconfig - Creating a Policy for the Sales Team

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
Do you want to add text to the subject of messages identified as SUSPECTED spam?

Do you want to add a custom header to messages identified as SUSPECTED spam? [N]> n

Marketing email is normally legitimate email but sometimes undesirable. Do you want to enable special treatment of marketing messages? [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 Virus Outbreak Filters for this policy? [Y]> y

Use the policy table default? [Y]> y

Incoming Mail Policy Configuration

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus: Content Filter</th>
<th>VOF:</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales_team</td>
<td>IronPort</td>
<td>Default</td>
<td>Default</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>IronPort</td>
<td>McAfee</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
- 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 Virus Outbreak Filter scanning.

**Table 3-138**  
*policyconfig - Creating a Policy for the Sales Team*

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Content Filter</th>
<th>VOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales_team</td>
<td>IronPort</td>
<td>Default</td>
<td>Default</td>
<td>Enabled</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>IronPort</td>
<td>McAfee</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
- FILTERS - Edit content filters
- CLEAR - Clear all policies
Table 3-139  policyconfig - Creating a Policy for the Engineering Team

[]> new

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]> 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]> 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]> 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 Virus 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 Virus Outbreak Filters? [N]> y

Choose the operation you want to perform:
Table 3-139  policyconfig - Creating a Policy for the Engineering Team

- 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 Virus 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

<table>
<thead>
<tr>
<th>Name:</th>
<th>Anti-Spam:</th>
<th>Anti-Virus:</th>
<th>Content Filter:</th>
<th>VOF:</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----</td>
<td>---------</td>
<td>-------------</td>
<td>-----------------</td>
<td>------</td>
</tr>
</tbody>
</table>

Cisco AsyncOS 8.0.1 CLI Reference Guide
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:

| Table 3-139  policyconfig - Creating a Policy for the Engineering Team |
|--------------|-----------------|-----------------|-----------------|
| sales_team   | IronPort        | Default         | Default         | Default         |
| engineering  | Default         | Default         | Default         | Enabled         |
| DEFAULT      | IronPort        | McAfee          | 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:

| Table 3-140  policyconfig - Creating the scan_for_confidential Content Filter |
|--------------|-----------------|-----------------|
| Name:        | Anti-Spam:      | Anti-Virus:     |
| sales_team   | IronPort        | Default         |
| engineering  | Default         | Default         |
| DEFAULT      | IronPort        | McAfee          |


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

[1]> 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. Envelope Recipient Address
Table 3-140 policyconfig - Creating the scan_for_confidential Content Filter

13. Envelope Recipient in LDAP Group
14. Envelope Sender Address
15. Envelope Sender in LDAP Group
16. Reputation Score
17. Remote IP
18. DKIM authentication result
19. SPF verification result

[1]> 1

Enter regular expression or smart identifier to search message contents for:

[1]> confidential

Threshold required for match:

[1]> 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
Table 3-140  policyconfig - Creating the scan_for_confidential Content 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)
Table 3-14  policyconfig - Creating the scan_for_confidential Content Filter

20. Encrypt (Final Action)
21. Encrypt on Delivery
22. Skip Virus 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
Table 3-140  policyconfig - Creating the scan_for_confidential Content 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)
Table 3-140 policyconfig - Creating the scan_for_confidential Content Filter

19. Skip Remaining Content Filters (Final Action)

20. Encrypt (Final Action)

21. Encrypt on Delivery

22. Skip Virus 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
Table 3-140  

policyconfig - Creating the *scan_for_confidential* Content 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

[]>

Code Example 3-141 illustrates creating the next two content filters. (Note that you cannot specify the variables for envelope sender and envelope recipient from within the CLI.)

Table 3-141  

policyconfig - 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

[]> new

Enter a name for this filter:

[]> no_mp3s

Enter a description or comment for this filter (optional):
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
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
Table 3-141  *policyconfig - Creating the no_mp3s and ex_employee Content Filters (Continued)*

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
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
Table 3-141  

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12.</td>
<td>Drop Attachments By File Type</td>
</tr>
<tr>
<td>13.</td>
<td>Drop Attachments By Size</td>
</tr>
<tr>
<td>14.</td>
<td>Send To System Quarantine</td>
</tr>
<tr>
<td>15.</td>
<td>Duplicate And Send To System Quarantine</td>
</tr>
<tr>
<td>16.</td>
<td>Add Log Entry</td>
</tr>
<tr>
<td>17.</td>
<td>Drop (Final Action)</td>
</tr>
<tr>
<td>18.</td>
<td>Bounce (Final Action)</td>
</tr>
<tr>
<td>19.</td>
<td>Skip Remaining Content Filters (Final Action)</td>
</tr>
<tr>
<td>20.</td>
<td>Encrypt (Final Action)</td>
</tr>
<tr>
<td>21.</td>
<td>Encrypt on Delivery</td>
</tr>
<tr>
<td>22.</td>
<td>Skip Virus Outbreak Filters check</td>
</tr>
</tbody>
</table>

[1]> 2

Enter the email address(es) to send the notification to:

[1]> joe@example.com

Do you want to edit the subject line used on the notification? [N]> y

Enter the subject to use:

[1]> 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
Table 3-141  *policyconfig - Creating the no_mp3s and ex_employee Content Filters* (Continued)

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

[]> 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
Table 3-141  

policyconfig - Creating the no_mp3s and ex_employee Content Filters (Continued)

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 Virus 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()
Table 3-141  \textit{policyconfig - Creating the no_mp3s and ex_employee Content Filters (Continued)}

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

[]> \texttt{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>Content Filter:</th>
<th>VOF:</th>
</tr>
</thead>
<tbody>
<tr>
<td>-----</td>
<td>------------</td>
<td>-------------</td>
<td>-----------------</td>
<td>------</td>
</tr>
</tbody>
</table>

\texttt{Cisco AsyncOS 8.0.1 CLI Reference Guide}
Table 3-141  policyconfig - Creating the no_mp3s and ex_employee Content Filters (Continued)

<table>
<thead>
<tr>
<th>Group</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Content Filter</th>
<th>VOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales_team</td>
<td>IronPort</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>Enabled</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>IronPort</td>
<td>McAfee</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
- MOVE - Move the position of a policy
- FILTERS - Edit content filters
- CLEAR - Clear all policies

Code Example 3-142 illustrates how to enable the policies once again to enable the content filters for some policies, but not for others.

Table 3-142  policyconfig 0 Enabling Content Filters for Specific Policies

Incoming Mail Policy Configuration

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Content Filter</th>
<th>VOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales_team</td>
<td>IronPort</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>Enabled</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>IronPort</td>
<td>McAfee</td>
<td>Off</td>
<td>Enabled</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:

- NEW - Create a new policy
Table 3-142 policyconfig 0 Enabling Content Filters for Specific Policies (Continued)

- 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

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Content Filter</th>
<th>VOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. sales_team</td>
<td>IronPort</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
</tr>
<tr>
<td>2. engineering</td>
<td>Default</td>
<td>Default</td>
<td>Default</td>
<td>Enabled</td>
</tr>
<tr>
<td>3. DEFAULT</td>
<td>IronPort</td>
<td>McAfee</td>
<td>Off</td>
<td>Enabled</td>
</tr>
</tbody>
</table>

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.
Marketing-Messages: IronPort - Deliver, Prepend "[MARKETING]" to Subject
Anti-Virus: McAfee - Scan and Clean
Content Filters: Off
Virus Outbreak Filters: Enabled. No bypass extensions.
Table 3-142   policyconfig 0 Enabling Content Filters for Specific Policies  (Continued)

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- VOF - Modify Virus Outbreak Filters policy
- FILTERS - Modify filters

[]> 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.    ex_employee

Enter the filter to toggle on/off, or press enter to finish:
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.
Marketing-Messages: IronPort - Deliver, Prepend "[MARKETING]" to Subject
Anti-Virus: McAfee - Scan and Clean
Content Filters: Enabled. Filters: scan_for_confidential, no_mp3s, ex_employee
Virus Outbreak Filters: Enabled. No bypass extensions.

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- VOF - Modify Virus Outbreak Filters policy
- FILTERS - Modify filters

Incoming Mail Policy Configuration

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus: Content Filter</th>
<th>VOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales_team</td>
<td>IronPort</td>
<td>Default</td>
<td>Default</td>
</tr>
</tbody>
</table>

Table 3-142 policyconfig 0 Enabling Content Filters for Specific Policies (Continued)
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

<table>
<thead>
<tr>
<th>Name</th>
<th>Anti-Spam</th>
<th>Anti-Virus</th>
<th>Content Filter</th>
<th>VOF</th>
</tr>
</thead>
<tbody>
<tr>
<td>sales_team</td>
<td>IronPort</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>Enabled</td>
</tr>
<tr>
<td>DEFAULT</td>
<td>IronPort</td>
<td>McAfee</td>
<td>Enabled</td>
<td>Enabled</td>
</tr>
</tbody>
</table>

Enter the name or number of the entry you wish to edit:

[]> 2

Policy Summaries:

Anti-Spam: Default
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
- VOF - Modify Virus 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
Table 3-142 policyconfig 0 Enabling Content Filters for Specific Policies (Continued)

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
Content Filters: Enabled. Filters: scan_for_confidential, ex_employee
Virus 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
- VOF - Modify Virus Outbreak Filters policy
- FILTERS - Modify filters
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.

Table 3-143 illustrates how to enable DLP policies on the default outgoing policy.

**Table 3-143  DLP Policies for Default Outgoing Policy**

```bash
mail3.example.com> policyconfig
```
Would you like to configure Incoming or Outgoing Mail Policies?

1. Incoming
2. Outgoing

[1]> 2

Outgoing Mail Policy Configuration

Name:           Anti-Spam:     Anti-Virus: Content Filter: VOF:     DLP:
-----           ---------- ----------------------------------------------
DEFAULT         Off            Off         Off             Off      Off

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

Name:           Anti-Spam:     Anti-Virus: Content Filter: VOF:     DLP:
-----           ---------- ----------------------------------------------
1. DEFAULT Off Off Off Off Off

Enter the name or number of the entry you wish to edit:

[1]> 1

Policy Summaries:

Table 3-143  DLP Policies for Default Outgoing Policy

Would you like to configure Incoming or Outgoing Mail Policies?

1. Incoming
2. Outgoing

[1]> 2

Outgoing Mail Policy Configuration

Name:           Anti-Spam:     Anti-Virus: Content Filter: VOF:     DLP:
-----           ---------- ----------------------------------------------
DEFAULT         Off            Off         Off             Off      Off

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

Name:           Anti-Spam:     Anti-Virus: Content Filter: VOF:     DLP:
-----           ---------- ----------------------------------------------
1. DEFAULT Off Off Off Off Off

Enter the name or number of the entry you wish to edit:

[1]> 1

Policy Summaries:
Table 3-143 DLP Policies for Default Outgoing Policy

<table>
<thead>
<tr>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anti-Spam: Off</td>
</tr>
<tr>
<td>Anti-Virus: Off</td>
</tr>
<tr>
<td>Content Filters: Off (No content filters have been created)</td>
</tr>
<tr>
<td>Virus Outbreak Filters: Off</td>
</tr>
<tr>
<td>DLP: Off</td>
</tr>
</tbody>
</table>

Choose the operation you want to perform:
- ANTISPAM - Modify Anti-Spam policy
- ANTIVIRUS - Modify Anti-Virus policy
- VOF - Modify Virus Outbreak Filters policy
- DLP - Modify DLP policy

[]> dlp

Choose the operation you want to perform:
- ENABLE - Enable DLP policy

[]> 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. Active California AB-1298
2. Suspicious Transmission - Zip Files
3. Restricted Files
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
Content Filters: Off (No content filters have been created)
Virus 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
- ANTIVIRUS - Modify Anti-Virus policy
- VOF - Modify Virus Outbreak Filters policy

Table 3-143  DLP Policies for Default Outgoing Policy
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

Table 3-144  quarantineconfig

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.
- VOPMANAGE - Manage the Virus Outbreak Filters quarantine.

[>] new

Please enter the name for this quarantine:

[>] HRQuarantine

Please enter the maximum size for this quarantine in MB:

[>] 1024

Retention period for this quarantine. (Use ‘d’ for days or ‘h’ for hours.):

[>] 15 d

1. Delete
Table 3-144  quarantineconfig (Continued)

2. Release

Enter default action for quarantine:

[1]> 2

Do you want to modify the subject of messages that are released because "HRQuarantine" becomes full? [N]> y

Do you want to give any users in the Operators/Guests groups access to this quarantine? [N]> y

No users in the Operators/Guests groups have access to "HRQuarantine"

Choose the operation you want to perform:

- NEW - Add a new user.

[1]> new

  1. hrquar

Select a user name or number

[1]> 1

Users in the Operators/Guests groups with access to "HRQuarantine":

  1. hrquar

Choose the operation you want to perform:

- DELETE - Delete a user.

[1]>

Currently configured quarantines:
Chapter 3 - 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.

Table 3-144  quarantineconfig (Continued)

<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>
<td>12h</td>
<td>Release</td>
</tr>
<tr>
<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.
- VOFMANAGE - Manage the Virus Outbreak Filters quarantine.

[>
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.

Note

When setting the assume the attachment matches the search pattern to Y, messages that cannot be scanned will cause the message filter rule to evaluate to true. This could result in unexpected behavior, such as the quarantining of messages that do not match a dictionary, but were quarantined because their content could not be correctly scanned. This setting does not apply to RSA Email DLP scanning.

Table 3-145  Scan Config - Configuring Scan Behavior

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.
Table 3-145  Scan Config - Configuring Scan Behavior

- EXPORT - Save mappings to a file.
- PRINT - Display the list.
- CLEAR - Remove all entries.
- SMIME - Configure S/MIME unpacking.

[4]> 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
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.
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.

Table 3-145    Scan Config - Configuring Scan Behavior

- 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.

[]> print
1. Fingerprint   Image
2. Fingerprint   Media
3. MIME Type     audio/*
4. MIME Type     image/*
5. MIME Type     video/*

>
Example

Table 3-146  stripheaders

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.

Table 3-147  
**textconfig - Create Text Resources**

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:

[]> `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)

Enter or paste the message disclaimer here. Enter '.' on a blank line to end.

This message was sent from an IronPort™ 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.
Table 3-147  `textconfig` - Create Text Resources

- DELETE - Remove a resource from the system.
- LIST - List configured resources.

[]> delete

Please enter the name or number of the resource to delete:

[]> 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.

[]>

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.

Table 3-148  `textconfig` - Importing a text file as a Text Resource

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.
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:

[]> strip.mp3files

Enter the name of the file to import:

[]> strip.mp3.txt

Enter the encoding to use for the imported file:

1. US-ASCII

[ list of encodings ]
Notification template 'strip.mp3files' created.

Current Text Resources:
1. disclaimer 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.

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.

Table 3-148 textconfig - Importing a text file as a Text Resource (Continued)

Table 3-149 textconfig - Exporting a Text Resource as a Text File
Table 3-149  text-config - Exporting a Text Resource as a Text File  (Continued)

- 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.
Logging and Alerts

This section contains the following CLI commands:

- alertconfig
- 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.
Creating a New Alert and Alert Recipient via the CLI

In this example, a new alert recipient (alertadmin@example.com) is created and set to receive critical system, hardware, and directory harvest attack alerts. The seconds to wait before sending a duplicate alert is set to 360 and the email From: address is set to Alerts@example.com.

Table 3-150  
alertconfig - Creating a New Alert and Alert Recipient

mail3.example.com> alertconfig

Sending alerts to:

  joe@example.com

  Class: All - Severities: All

Seconds to wait before sending a duplicate alert (seconds): 300

Alerts will be sent using the system-default From Address.

IronPort AutoSupport: Enabled

You will receive a copy of the weekly AutoSupport reports.

Choose the operation you want to perform:

- NEW - Add a new email address to send alerts.
- EDIT - Modify 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.

[]> new

Please enter a new email address to send alerts.

(RE: "administrator@example.com")

[]> alertadmin@example.com
Choose the Alert Classes. Separate multiple choices with commas.

1. All
2. System
3. Hardware
4. Virus Outbreak Filters
5. Anti-Virus
6. Anti-Spam
7. Directory Harvest Attack Prevention

[1]> 2,3,7

Select a Severity Level. Separate multiple choices with commas.

1. All
2. Critical
3. Warning
4. Information

[1]> 2

Sending alerts to:

joe@example.com

   Class: All - Severities: All

alertadmin@example.com

   Class: Hardware - Severities: Critical
   Class: Directory Harvest Attack Prevention - Severities: Critical
   Class: System - Severities: Critical

Seconds to wait before sending a duplicate alert (seconds): 300

Alerts will be sent using the system-default From Address.
Table 3-150  alertconfig - Creating a New Alert and Alert Recipient  (Continued)

IronPort AutoSupport: Enabled

You will receive a copy of the weekly AutoSupport reports.

Choose the operation you want to perform:
- NEW - Add a new email address to send alerts.
- EDIT - Modify 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.

[ ]> setup

Seconds to wait before sending a duplicate alert (seconds):

[300]> 360

Would you like to enable IronPort AutoSupport, which automatically emails system alerts and weekly status reports directly to IronPort Customer Care? (Enabling AutoSupport is recommended.) [Y]>

Would you like to receive a copy of the weekly AutoSupport reports? [Y]>

Sending alerts to:
joe@example.com
    Class: All - Severities: All
alertadmin@example.com
    Class: Hardware - Severities: Critical
    Class: Directory Harvest Attack Prevention - Severities: Critical
Class: System - Severities: Critical

Seconds to wait before sending a duplicate alert (seconds): 360

Alerts will be sent using the system-default From Address.

IronPort AutoSupport: Enabled
You will receive a copy of the weekly AutoSupport reports.

Choose the operation you want to perform:

- NEW - Add a new email address to send alerts.
- EDIT - Modify 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.

queries> from

Alerts will be sent using the system-default From Address.

Choose the operation you want to perform:

- EDIT - Edit the From Address.

queries> edit

Please enter the From Address to use for alerts.

queries> Alerts@example.com

Sending alerts to:
Table 3-150  alertconfig - Creating a New Alert and Alert Recipient  (Continued)

joe@example.com
   Class: All - Severities: All

alertadmin@example.com
   Class: Hardware - Severities: Critical
   Class: Directory Harvest Attack Prevention - Severities: Critical
   Class: System - Severities: Critical

Seconds to wait before sending a duplicate alert (seconds): 360

Alerts will be sent using this configured From Address: Alerts@example.com

IronPort AutoSupport: Enabled
You will receive a copy of the weekly AutoSupport reports.

Choose the operation you want to perform:
- NEW - Add a new email address to send alerts.
- EDIT - Modify 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.

/> mail3.example.com>

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 3-151  grep Command Options**

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>-C</code></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><code>-e</code></td>
<td>Enter a regular expression.</td>
</tr>
<tr>
<td><code>-i</code></td>
<td>Ignores case sensitivities.</td>
</tr>
<tr>
<td><code>-p</code></td>
<td>Paginates the output.</td>
</tr>
<tr>
<td><code>-t</code></td>
<td>Runs the grep command over the tail of the log file.</td>
</tr>
<tr>
<td><code>regex</code></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:

**Table 3-152  grep-Search for Text in a Log File**

```
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' ()
```
Table 3-152 grep-Search for Text in a Log File

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 22:47:42 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' ()

Table 3-153 logconfig - Configuring a New Delivery Log

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
Table 3-153  \textit{logconfig} - Configuring a New Delivery Log (Continued)

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.
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]> 8

Please enter the name for the log:

[1]> myDeliveryLogs

Choose the method to retrieve the logs.

1. FTP Poll
2. FTP Push
3. SCP Push
4. Syslog Push

[1]> 2
<table>
<thead>
<tr>
<th>Table 3-153</th>
<th>logconfig - Configuring a New Delivery Log (Continued)</th>
</tr>
</thead>
</table>

Hostname to deliver the logs:

```bash
[]> yourhost.example.com
```

Username on the remote host:

```bash
[]> yourusername
```

Password for youruser:

```bash
[]> thepassword
```

Directory on remote host to place logs:

```bash
[]> /logs
```

Filename to use for log files:

```bash
[conversation.text]>
```

Maximum time to wait before transferring:

```bash
[3600]>
```

Maximum filesize before transferring:

```bash
[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
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...

---

**Table 3-153  logconfig - Configuring a New Delivery Log  (Continued)**

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. "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

cisco asyncoS 8.0.1 CLI Reference Guide
“Configuring Host Keys” in the *IronPort AsyncOS Advanced User Guide* for information about Host keys, and “Managing Secure Shell (SSH) Keys” in the *IronPort AsyncOS User Guide* for more information about User keys.) Also note that an IP address can be used at the hostname prompt.

### Table 3-154  logconfig - Creating a SCP 'Push' Delivery Log

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. "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
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:

[]> 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]>

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]>

Maximum filesize before transferring:

[10485760]>
Table 3-154  logconfig - Creating a SCP ‘Push’ Delivery Log (Continued)

Protocol:
1. SSH1
2. SSH2

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
AAAAB3NzaC1kc3MAAACBAlWgi4IlWLDVndb1wEsArt9LVE2t35yE9JBT6dUwLvoq0G3FRqifrce92zywH
tc/ZWyXaOVTIM3X4lhp1EcscMep2XkpSnPF2x2y8bqkpsJSQcQeM8ZMDj0Fm8ghiwXyH7oNEUJCCPnPx
Ay44rx1J5yZ4x9eIoALp0dHU00G+J1NAAAOFQDQl5GY/X9PlDM3fPMvEy7wc0ed1wAAAIB9cgnTEFPIWTA
Gr1RtbowZP5wzVDTXLhdxj1o4+bb4hBR7Dkc80+nAAFnThyH/J8R3w1JUVF79M5geKjXzuJGDK3Zw
13UyefpBqXp2012LRQ5JYx1WwwYy/z/roooNBnF4sh12mtq3tde1176bQgtwaQ4wK015k1zOWwPwAAA
IA1cRYat3y+B1V/V6wB6bBr=+uULv3eK38gafulp4M9BkxK9G6E0l8q82ozwWBy/p1TRQ6h4MBrlx
TF4VEY0sArlr7tuUJC1Q5GqvCgh7Nd3YNais2CSbEKB6eA10TF6+SX2RNPcUF3Wg9yw92xtqQPRMcZeLl
K2ZJRh6C+Vw==

Add the preceding host key(s) for 10.1.1.1? [Y] > y

Currently installed host keys:
1. 10.1.1.1 1024 35 12260462076447444117847407996206675325...3520565607
2. 10.1.1.1 ssh-dss AAAAB3NzaC1kc3MAAACBAlWgi4IlWLDVndb1wE...JRkhC+Vw==

Choose the operation you want to perform:
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.

```
[]> scan
```

Choose the ssh protocol type:
1. SSH1:rsa
2. SSH2:rsa
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 UPD, with a ‘mail’ facility and stored in the directory.

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. "eugui_logs" Type: "IronPort Spam Quarantine GUI Logs" Retrieval: FTP Poll
12. "ftpd_logs" Type: "FTP Server Logs" Retrieval: FTP Poll
Table 3-155 logconfig - Creating a SCP 'Push' Delivery Log (Continued)

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
17. "scanning" Type: 'Scanning Logs' Retrieval: FTP Poll
18. "slbid_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
21. "system_logs" Type: 'System 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

Please enter the name for the log:

[1]> **MailLogSyslogPush**

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**
Table 3-155  logconfig - Creating a SCP 'Push' Delivery Log (Continued)

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

Table 3-156  rollovernow

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. "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. "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
**Table 3-156  rollovernow (Continued)**

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.
```
Table 3-157  snmpconfig (Continued)

Object Description

[ ]> 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]> 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]

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
Table 3-157  snmpconfig (Continued)

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

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

Table 3-158 tail

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.
Table 3-158  tail (Continued)

|> 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

mail3.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. Enable centralized or local reporting for the Email Security 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)

Table 3-160  reportingconfig - Enabling reporting filters

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
Table 3-160  reportingconfig - Enabling reporting filters

reporting data

- DOMAIN - Configure domain report settings.

- MODE - Enable/disable centralized reporting.

[>
Enabling HAT REJECT Information for Domain Reports (M-Series only)

Table 3-161  reportingconfig - Enabling HAT REJECT information for domain reports

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.

[]>

Enabling Timeout Alerts (M-Series only)

Table 3-162  reportingconfig - Enabling timeout alerts

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.

[]> 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

**Table 3-163** reportingconfig - Enabling centralized reporting

```plaintext
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
```

Configure Storage Limit for Reporting Data (C-Series only)

**Table 3-164** reportingconfig - Configure storage limit for centralized reporting data

```plaintext
esa01-vmw1-tpub.qa> reportingconfig

Choose the operation you want to perform:
- MAILSETUP - Configure reporting for the ESA.
- MODE - Enable centralized or local reporting for the ESA.

[]> mailsetup
```
**Table 3-164**  
`reportingconfig - Configure storage limit for centralized reporting data`

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
Table 3-164  reportingconfig - Configure storage limit for centralized reporting data

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**

**Table 3-165  sbstatus - Success**

mail3.example.com> sbstatus

SenderBase host status

Status as of: Tue Oct 21 10:55:04 2003

Host up/down: up

If the IronPort appliance is unable to contact the SenderBase Reputation Service, or the service has never been contacted, the following is displayed:

**Table 3-166  sbstatus - Failure**

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

Table 3-167  

senderbaseconfig

ail3.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:

- listenerconfig
- localeconfig
- smtpauthconfig

listenerconfig

Description

The listenerconfig command allows you to create, edit, and delete a listener. IronPort 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 IronPort appliance communicates with the system that is injecting email.

### Table 3-168 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 Public and private 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. Private &quot;Blackhole&quot; 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 Chapter 9, “Testing and Troubleshooting” of the AsyncOS Advanced User Guide 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.
• Adding a new listener:

```plaintext
listenerconfig new <name> <public|private|blackhole|blackholequeueuing> <interface_name> <smtp|qmqp>
```

• Deleting a listener:

```plaintext
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 3-169, "listenerconfig Argument Values -HAT," on page 371

• Adding a new sendergroup to the HAT

```plaintext
listenerconfig edit <name> hostaccess new sendergroup <name> <host_list> <behavior> [options [--comments]]
```

• Add a new policy to the HAT

```plaintext
listenerconfig edit <name> hostaccess new policy <name> <behavior> [options]
```

• Add a new host list to a sendergroup

```plaintext
listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> new <host_list>
```

• Delete a host from a sendergroup

```plaintext
listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> delete <host>
```

• Move a host in a sendergroup’s list order

```plaintext
listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> move <host> <host-to-insert-before>
```

• Modify a sendergroup’s policy

```plaintext
listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> policy <behavior> [options]
```

• Print a sendergroup listing

```plaintext
listenerconfig edit <name> hostaccess edit sendergroup <name> print
```
• Rename a sendergroup

listenerconfig edit sendergroup <name> hostaccess edit sendergroup <name> rename <name>

• Editing a HAT’s policy

listenerconfig edit <name> hostaccess edit policy <name> <behavior> [options]

• Deleting a sendergroup from a HAT

listenerconfig edit <name> hostaccess delete sendergroup <name>

• Deleting a policy

listenerconfig edit <name> hostaccess delete policy <name>

• Moving a sendergroup’s position in the HAT

listenerconfig edit <name> hostaccess move <group> <group-to-insert-before>

• Changing a HAT default option

listenerconfig edit <name> hostaccess default [options]

• Printing the hostaccess table

listenerconfig edit <name> hostaccess print

• Import a local copy of a HAT

listenerconfig edit <name> hostaccess import <filename>

• Exporting a copy of the HAT from the IronPort appliance

listenerconfig edit <name> hostaccess export <filename>
- Deleting all user defined sendergroups and policies from the HAT

```plaintext
listenerconfig edit <name> hostaccess clear
```

### Table 3-169 `listenerconfig` Argument Values - HAT

<table>
<thead>
<tr>
<th>Argument</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><code>&lt;behavior&gt;</code></td>
<td>&quot;Accept&quot;, &quot;Relay&quot;, &quot;Reject&quot;, &quot;TCP Refuse&quot;, or &quot;Continue&quot;. When selecting a behavior for use with a sendergroup, additional behaviors of the form &quot;Policy: FOO&quot; are available (where &quot;FOO&quot; is the name of policy).</td>
</tr>
<tr>
<td><code>&lt;filename&gt;</code></td>
<td>The filename to use with importing and exporting the hostaccess tables.</td>
</tr>
<tr>
<td><code>&lt;group&gt;</code></td>
<td>A sendergroup <code>&lt;name&gt;</code>.</td>
</tr>
<tr>
<td><code>&lt;host&gt;</code></td>
<td>A single entity of a <code>&lt;host_list&gt;</code></td>
</tr>
<tr>
<td><code>&lt;host_list&gt;</code></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><code>dnslist[query.blacklist.example]</code></td>
</tr>
<tr>
<td><code>&lt;name&gt;</code></td>
<td>The name of the sendergroup or policy. HAT labels must start with a letter or underscore, followed by any number of letters, numbers, underscores or hyphens.</td>
</tr>
</tbody>
</table>
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 3-170, “listenerconfig Argument Values - RAT,” on page 373.
- Adding a new recipient to the RAT

  ```bash
  listenerconfig edit <name> rcptaccess new <rat_addr> [options]
  ```

- Editing a recipient in the RAT

  ```bash
  listenerconfig edit <name> rcptaccess edit <rat_addr> [options]
  ```

- Deleting a recipient from the RAT

  ```bash
  listenerconfig edit <name> rcptaccess delete <rat_addr>
  ```

- Printing a copy of the RAT

  ```bash
  listenerconfig edit <name> rcptaccess print
  ```

- Importing a local RAT to your IronPort appliance

  ```bash
  listenerconfig edit <name> rcptaccess import <filename>
  ```

- Exporting a RAT

  ```bash
  listenerconfig edit <name> rcptaccess export <filename>
  ```

- Clearing the default access

  ```bash
  listenerconfig edit <name> rcptaccess clear <default_access>
  ```

**Table 3-170  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: CIDR addresses (10.1.1.0/24) Hostname (crm.example.com) Partial Hostname (.example.com) Usernames (postmaster@) Full email addresses (<a href="mailto:joe@example.com">joe@example.com</a>, joe@[1.2.3.4]) Note Separate multiple hosts with commas</td>
</tr>
<tr>
<td>&lt;options&gt;</td>
<td>--action Action to apply to address(es). Either “Accept” or “Reject”. Default is “Accept”.</td>
</tr>
</tbody>
</table>

Cisco AsyncOS 8.0.1 CLI Reference Guide
Example - Adding a listener

In the following example, the `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.

```
mail3.example.com> listenerconfig
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.
- 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)

[] > 2

Choose a protocol.

1. SMTP
2. QMQP

[] > 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
### Table 3-171  listenerconfig - Adding a listener (Continued)

<table>
<thead>
<tr>
<th>Default Policy Parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Message Size: 100M</td>
</tr>
<tr>
<td>Maximum Number Of Connections From A Single IP: 600</td>
</tr>
<tr>
<td>Maximum Number Of Messages Per Connection: 10,000</td>
</tr>
<tr>
<td>Maximum Number Of Recipients Per Message: 100,000</td>
</tr>
<tr>
<td>Maximum Number Of Recipients Per Hour: Disabled</td>
</tr>
<tr>
<td>Use SenderBase for Flow Control:  No</td>
</tr>
<tr>
<td>Spam Detection Enabled:  No</td>
</tr>
<tr>
<td>Virus Detection Enabled:  Yes</td>
</tr>
<tr>
<td>Allow TLS Connections: No</td>
</tr>
<tr>
<td>Allow SMTP Authentication: No</td>
</tr>
<tr>
<td>Require TLS To Offer SMTP authentication: No</td>
</tr>
</tbody>
</table>

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.
- DELETE - Remove a listener.
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 *IronPort AsyncOS User Guide*.

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.

[]> edit

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

[]> 1
```
Table 3-172  listenerconfig - Exporting the HAT

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.

[ ]> hostaccess

Default Policy Parameters
Table 3-172  listenerconfig - Exporting the HAT

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
Envelope Sender DNS Verification 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 {}
Table 3-172  listenerconfig - Exporting the HAT

$TRUSTED

ACCEPT {

  tls = "off"
  dhap_limit = 0
  max_rcpts_per_hour = -1
  virus_check = "on"
  max_msgs_per_session = 5000
  spam_check = "off"
  use_sb = "off"
  max_message_size = 104857600
  max_rcpts_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

}
Table 3-172  listenerconfig - Exporting the HAT

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
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:

```
spandomain.com   REJECT
.spandomain.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 IronPort 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 *IronPort AsyncOS User Guide*.

**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.

**Table 3-173  listenerconfig - Importing the HAT**

```
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.
```
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
Table 3-173  listenerconfig - Importing the HAT (Continued)

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.
Table 3-173  listenerconfig - Importing the HAT (Continued)

[]> import

Enter the name of the file to import:

[]> inbound.HAT.txt

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.
Table 3-173   listenerconfig - Importing the HAT (Continued)

- 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

$ACCEPTED

ACCEPT

$THROTTLLED

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
Table 3-173  listenerconfig - Importing the HAT (Continued)

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")
TCPREFUSE (TCPREFUSE the IP addresses in "251.192.1")

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 - Advanced HAT Parameters**

Table 3-174 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 3-174.

<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 (or 1k)</td>
</tr>
<tr>
<td>Maximum message size</td>
<td>max_message_size</td>
<td>Number</td>
<td>1048576 (or 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></td>
<td>Number</td>
<td>550</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.

### Table 3-174 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>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>
<tr>
<td>Define SenderBase Reputation Score</td>
<td>sbrs[value1:value2]</td>
<td>-10.0- 10.0</td>
<td>sbrs[-10:-7.5]</td>
</tr>
<tr>
<td>Directory Harvest Attack Prevention: Maximum Invalid Recipients Per Hour</td>
<td>dhap_limit</td>
<td>Number</td>
<td>150</td>
</tr>
</tbody>
</table>
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 3-175  SPF Control Settings**

<table>
<thead>
<tr>
<th>Conformance Level</th>
<th>Available SPF Control Settings</th>
</tr>
</thead>
</table>
| SPF Only          | • whether to perform HELO identity check  
                   | • SMTP actions taken based on the results of the following identity checks:  
                   | • HELO identity (if enabled)  
                   | • MAIL FROM Identity  
                   | • SMTP response code and text returned for the REJECT action  
                   | • verification time out (in seconds) |
| SIDF Compatible   | • whether to perform a HELO identity check  
                   | • 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  
                   | • SMTP actions taken based on the results of the following identity checks:  
                   | • HELO identity (if enabled)  
                   | • MAIL FROM Identity  
                   | • PRA Identity  
                   | • SMTP response code and text returned for the REJECT action  
                   | • verification timeout (in seconds) |
| SIDF Strict       | • SMTP actions taken based on the results of the following identity checks:  
                   | • MAIL FROM Identity  
                   | • PRA Identity  
                   | • SMTP response code and text returned in case of SPF REJECT action  
                   | • verification timeout (in seconds) |

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.

**Table 3-176  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
[1]> 1

What SMTP action should be taken if HELO check returns Neutral?
1. Accept
2. Reject
[1]> 1

What SMTP action should be taken if HELO check returns SoftFail?
1. Accept
2. Reject
The following shows how the SPF/SIDF settings are displayed for the listener’s Default Policy Parameters.

Table 3-176 SPF/SIDF Settings

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]>

Would you like to change SMTP response settings for the REJECT action? [N]>

Verification timeout (seconds)

The following shows how the SPF/SIDF settings are displayed for the listener’s Default Policy Parameters.

Table 3-177 SPF/SIDF in Default Policy Parameters

SPF/SIDF Verification Enabled: Yes
Conformance Level: SPF only
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.

---

### Table 3-177 SPF/SIDF in Default Policy Parameters

<table>
<thead>
<tr>
<th>SMTP actions:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Do HELO test</strong>: Yes</td>
</tr>
<tr>
<td><strong>For HELO Identity</strong>:</td>
</tr>
<tr>
<td>None, Neutral: Accept</td>
</tr>
<tr>
<td>SoftFail, Fail, TempError, PermError: Reject</td>
</tr>
<tr>
<td><strong>For MAIL FROM Identity</strong>: Accept</td>
</tr>
</tbody>
</table>

**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

**Table 3-178 localeconfig**

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:
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:"

Table 3-179  smtpauthconfig

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:
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)
3. Data 2 (192.168.2.1/24: mail3.example.com)
4. 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

---

Table 3-179  smtpauthconfig (Continued)
Table 3-179  smtpauthconfig (Continued)

- EDIT - Edit an existing SMTP Auth profile
- PRINT - List all profiles
- DELETE - Delete a profile
- CLEAR - Delete all profiles

mail3.example.com> commit

Please enter some comments describing your changes:

mail3.example.com> 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 IronPort C-Series 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

Table 3-180  systemsetup

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"): 
Table 3-180  \textit{systemsetup}

[\texttt{>} \texttt{Data 1}]

Enter the static IP address for "Data 1" on the "Data 1" interface? (Ex: "192.168.1.1"):

[\texttt{>} \texttt{192.168.1.1}]

What is the netmask for this IP address? (Ex: "255.255.255.0" or "0xffffff00"):

[\texttt{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?:

[\texttt{192.168.1.1}]> \texttt{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.

[1]> 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"): 

[1]> InboundMail

Please choose an IP interface for this Listener.

1. Data 1 (192.168.1.1/24: ironport-C100.example.com)

[1]> 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]> n

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]> 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
Table 3-180  systemsetup

remote domain.) [Y]> 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
Require TLS To Offer SMTP authentication: No
DKIM/DomainKeys Signing Enabled: No
DKIM Verification Enabled: No
SPF/SIDF Verification Enabled: No
Envelope Sender DNS Verification Enabled: No
Domain Exception Table Enabled: No
Table 3-180  systemsetup

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
Chapter

Table 3-180 systemsetup

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 Virus Outbreak Filters? [Y]> y

Virus Outbreak Filters enabled. The current threshold is 3.

Virus 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 Virus 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

Table 3-180  systemsetup

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

Do you wish to use NTP to set system time? [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]>

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 does not support a batch format.

**Example - Creating a New User Account**

The following example shows how to create a new user account with a Help Desk User role.

<table>
<thead>
<tr>
<th>Table 3-181</th>
<th>userconfig - Creating new user account</th>
</tr>
</thead>
<tbody>
<tr>
<td>mail3.example.com&gt; <code>userconfig</code></td>
<td></td>
</tr>
</tbody>
</table>
Choose the operation you want to perform:

- NEW - Create a new account.
- EDIT - Modify an account.
- DELETE - Remove an account.
- PASSWORD - Change the password for a user.
- EXTERNAL - Configure external authentication.

[1]> new

Enter the new username.

[1]> helpdesk1

Enter the full name for helpdesk1.

[1]> Help Desk

Assign a role to "helpdesk1":

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. Help Desk Users - Help Desk users have access only to ISQ and Message Tracking.

[1]> 5
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.

Table 3-182  userconfig - Setting up a RADIUS server

Users:
Table 3-182  userconfig - Setting up a RADIUS server

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.
- PASSWORD - Change the password for a user.
- EXTERNAL - Configure external authentication.

[>] external

Choose the operation you want to perform:
- 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]>
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]> 2
**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.

---

**Table 3-182 userconfig - Setting up a RADIUS server**

Configured RADIUS servers:

<table>
<thead>
<tr>
<th>Host</th>
<th>Port</th>
<th>Timeout (s)</th>
<th>Auth type</th>
</tr>
</thead>
<tbody>
<tr>
<td>radius.example.com</td>
<td>1812</td>
<td>5</td>
<td>pap</td>
</tr>
</tbody>
</table>

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.

[>]
Example

Table 3-183  password

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

Table 3-184  

```
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>
<tr>
<td>admin</td>
<td>10.251.60.37</td>
<td>Tue Aug 30 01:45</td>
<td>Tue Aug 30 02:17</td>
<td>32m</td>
</tr>
<tr>
<td>admin</td>
<td>10.251.16.231</td>
<td>Mon Aug 29 10:29</td>
<td>Mon Aug 29 10:41</td>
<td>11m</td>
</tr>
<tr>
<td>shutdown</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></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

Table 3-185 who

mail3.example.com> who

<table>
<thead>
<tr>
<th>Username</th>
<th>Login Time</th>
<th>Idle Time</th>
<th>Remote Host</th>
<th>What</th>
</tr>
</thead>
<tbody>
<tr>
<td>admin</td>
<td>03:27PM</td>
<td>0s</td>
<td>10.1.3.201</td>
<td>cli</td>
</tr>
</tbody>
</table>

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

Table 3-186 whoami

mail3.example.com> whoami

Username: admin

Full Name: Administrator

Groups: admin, operators, config, log, guest