

Caldera Volution Messaging Server

Administrator's Guide

Caldera International, Inc.

Caldera Volution Messaging Server: Administrator's Guide

by Caldera International, Inc.

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Document version: 1.0

23 October 2001

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Preface

This book introduces the Caldera Volution™ Messaging Server (hereafter "Messaging Server"), a highly reliable, scalable messaging server that runs on the Caldera® OpenLinux® and Open UNIX® 8 platforms. This book is intended primarily for Messaging Server administrators, as well others who install and maintain Messaging Server software.

About Messaging Server Documentation

This *Administrator's Guide* provides a complete presentation of graphical and command line interfaces, advanced configuration and administration guidelines, and detailed background information. It describes:

- Messaging Server architecture.
- how to configure and administer the messaging server components.
- how to manage mail server functionality.
- how to manage calendar server functionality.
- mail client user administration procedures.
- security concerns and procedures.
- how to customize component configuration.

Selected topics from the *Administrator's Guide* are also presented in Help screens from the **Server Manager** administrative interface.

The Messaging Server documentation set also includes:

Getting Started Guide

Instructions and guidelines on basic installation and graphical administration procedures, intended to facilitate deployment of a standard Messaging Server system. These are available online using DocView when the product is installed, and in HTML and PDF formats on distribution media. It is also available in printed form with the product distribution.

Client User's Guide

Detailed instructions on mail client configuration and user preferences, intended to be viewed principally from Help screens in the client **Preferences Manager**. This is available for administrators online using DocView when the product is installed, and in HTML and PDF formats on distribution media.

manual pages

Detailed reference information is provided for:

- file formats (Section 5)
- command line utilities and Application Programming Interface (API – Section 8)

Note: While most of these utilities are intended to be used directly by administrators, some are designed to be executed by graphical interfaces only and should not be used on the command line. See "Administrative Interfaces" for a discussion of command line administration.

Manual pages are available using the standard **man(1)** command and from DocView.

component documentation

Documentation included with the principal open source components is accessible from the Messaging Server page in DocView:

- Postfix (Message Transfer Agent)
- Cyrus (POP/IMAP server and message store)
- OpenLDAP™ (directory server)
- Horde (PHP framework for web-based applications, including webmail)
- IMP (webmail client)

Note: These entries are also available if you enable the DocView to provide access to all RPM documentation; see the DocView documentation for more information.

Consult the *Administrator's Guide* before using this documentation to modify component configuration; some component configuration values are set by the Messaging Server and must not be altered.

The latest news about Messaging Server features and product enhancements are provided in regularly updated *Late News* and *FAQ* (Frequently Asked Questions) documents. They are available on the web and are free to all customers:

<http://www.caldera.com/support/docs/volution/msg>

Viewing OpenLinux Documentation

DocView is a documentation server for Caldera OpenLinux. It provides unified access to most of the documentation packages installed on your system, including Caldera Volution Messaging Server documentation, the *OpenLinux System Administration Guide*, manual pages, links to OpenLinux Help, FAQs, HOWTOs, the Caldera Support Knowledge Base, Caldera Education site, and much more.

DocView is configured by default as a Messaging Server system service. To access DocView and learn more about its features, point your browser at:

http://system_name:8457/

where *system_name* is the host name of your Messaging Server system.

If you are running the Messaging Server on an Open UNIX 8 system, you should also consult the *Linux® Kernel Personality for Open UNIX 8* documentation set, available using the help system on Open UNIX 8 platforms.

Technical Support

The Messaging Server product can be purchased with one of the following technical support options included:

- 60-day email installation and configuration support, including installation of the Messaging Server software and configuration for users of the local intranet only.

- Six-month unlimited email and telephone support, including three technical contacts and the configuration of anti-spam, anti-virus, networking connections, and connections to an ISP.

Products purchased with the bundled support options have a Support Validation Code Card included in the product box explaining the type of technical support service and contact information. Please refer to this card for more detailed information.

In addition, Caldera International offers a wide variety of service options. For more information on Caldera's service offerings, see the <http://www.caldera.com/support> web page, contact your local Caldera sales representative, or:

In the United States and Canada

Phone 1-800-726-8649.

In Latin American countries

See <http://www.la.caldera.com/> for the nearest Caldera Sales Office.

In Europe, Middle East, India, Africa and the Pacific Rim

Phone +44(0)1923-813 600.

We also recommend that you:

- register your product
- consult the *Late News* and *FAQ* documents
- familiarize yourself with Caldera Self-Help Services

Register Your Product

We encourage you to register your product to stay current on the latest Caldera product and services related information. To register your product, go to:

<http://www.caldera.com/support/registration>

Messaging Server Late News and FAQ

The latest news about Messaging Server features and product enhancements are provided in regularly updated *Late News* and *FAQ* (Frequently Asked Questions) documents. They are available on the web and are free to all customers:

<http://www.caldera.com/support/docs/volution/msg>

Caldera Self-Help Services

Available to our customers anytime and anywhere is our 24x7 Self-Help support web site, located at:

http://www.caldera.com/support/self_help.html

Within Self-Help, we offer installation support solutions through an easy-to-use single web view. Key resources available are:

- Access to Caldera's Linux and Unix Knowledge Center
- FAQs - Customer identified Top Solutions
- Certified Hardware Listing for Caldera Products
- Caldera Software Download Areas
- Product Registration Information
- Product Bug Reporting
- Various Linux and UNIX News Groups and Mail List Discussions

How Can We Improve This Book?

What did you find particularly helpful in this book? Are there mistakes in this book? Could it be organized more usefully? Did we leave out information you need or include unnecessary material? If so,

please tell us.

To help us implement your suggestions, include relevant details, such as book title, section name, page number, and system component. We would appreciate information on how to contact you in case we need additional explanation.

Note: Technical Publications cannot provide technical support. For answers to technical questions, please contact your software vendor or your support representative, or refer to the "Technical Support" section above.

To contact us with documentation-related questions or comments, email us at <techpubs@caldera.com>.

Thank you.

Chapter 1. About the Volution Messaging Server

Caldera Volution Messaging Server is a messaging server product built around directory services and industry-standard open source components. The design goals of the Messaging Server required:

- ease of use.
- ease of management.
- stability.
- security.
- ability to integrate with popular email clients.
- superior performance in all these areas than competing solutions for small and medium businesses.

The principle components of the Messaging Server are:

OpenLDAP (directory services)

The Messaging Server uses a Lightweight Directory Access Protocol (LDAP) directory to store information concerning mail accounts, mail aliases, and the mail domains configured on your server. OpenLDAP is the directory server for the Messaging Server. Both personal and corporate user information and mail authentication are all stored in the directory and now easily managed using the **Server Manager**.

Postfix (MTA)

The heart of any messaging server is the Mail Transfer Agent (MTA), which is responsible for queuing and routing of email messages, handling mailing lists and aliases, and forwarding email. Postfix is the Mail Transport Agent for the Messaging Server. Unlike other MTA systems before it, Postfix (originally known as IBM Secure Mailer) was designed explicitly with security in mind. Postfix has been configured to query the LDAP directory for information needed to deliver mail to the correct Cyrus inbox and to resolve mail aliases.

Cyrus (message store)

The message store is used to store mail folders. The Cyrus message store provides access to personal mail through the Internet Message Access Protocol (IMAP4) and Post Office Protocol (POP) via its IMAP and POP server. IMAP and POP servers are key components that allow email clients to connect to the server and fetch mail. The Cyrus server differs from other message store

and IMAP server implementations in that it is run on "sealed" servers, where users are not normally permitted to log in. The Cyrus server queries the LDAP directory for authentication of users using the **pam_ldap** interface on Caldera OpenLinux.

The Cyrus message store is stored in parts of the filesystem that are private to the Cyrus system and all user access to mail is only through clients using the IMAP and POP3 protocols. This means that Messaging Server mailboxes are not compatible with traditional UNIX or Linux flat file mailbox format and you will not be able to access them using **mailx** or any other client that does not support IMAP or POP. However, the Cyrus database mailbox format provides a message store which is much more scalable than the traditional flat file format. Also, users are able to access their mail from command line utilities, but they will have to use the **fetchmail** utility to do so.

The Messaging Server also provides:

PAM LDAP module

The LDAP Pluggable Authentication Module provides the ability for IMAP and POP services to authenticate against passwords stored in the LDAP directory.

OpenSSL

OpenSSL is a Secure Sockets Layer communications library that provides cryptographic security for the Cyrus IMAP and POP servers and the **Server Manager** interface.

Apache – webserver

The Messaging Server configures the standard Apache webserver (installed by default with Caldera OpenLinux) to serve the **Server Manager** mail administration and mail client preferences interfaces.

MUA support

An email client is called a Mail User Agent (MUA). MUA functionality is often included with Internet browsers together with calendar clients capability. The Messaging Server supports standard mail clients, and it provides a user management interface to enable server-based functionality on Outlook clients.

local delivery agent

MTA's do not communicate directly with the message store, rather they call a local delivery agent, which is a simple program that knows how to place a mail message in a given user's inbox. The

local delivery agent for the Messaging Server is the Cyrus **deliver** program.

Chapter 2. Configuration and Administration

Administrative Interfaces

The Messaging Server includes these administrative interfaces:

Server Manager

The principle graphical interface for Messaging Server administration. It provides mail server administrative screens accessible only by administrators with the login name "*admin*". For more information about server administration screens, see "System settings" and "Mail administration".

By default, the **Server Manager** is served by the Apache webserver at:

http://hostname/msg

where *hostname* is the value returned by the **hostname(1)** on the Messaging Server system.

Preferences Manager

The Messaging Server mail client user interface. It provides client mail preference screens accessible to all users with an active Messaging Server mail account and an Internet browser. Like the **Server Manager** screens, it is served by the Apache webserver at:

http://hostname/msg

although logging in with a user mail account displays a different set of screens. For more information about client preference screens, see "Managing client preferences".

Webmin

WebminTM is the browser-based system administration interface for Caldera OpenLinux Server 3.1. While it is not the principal Messaging Server administrative interface, it is the preferred utility for managing system functions used by the Messaging Server, such as:

- network configuration, including DNS/BIND
- SSL certificate and key management
- MySQL management for Webmail components

For more information, see "Introduction to Webmin" in the *Caldera OpenLinux System Administration Guide*.

Command line utilities and scripts

Although most administrative functions can be managed with the **Server Manager**, the following command lines utilities are also available:

msgaclget(8)

get current state of LDAP access controls

msgaclset(8)

modify the state of LDAP access controls

msgaliasadd(8)

add a member to a Messaging Server alias

msgaliascreate(8)

create a new Messaging Server alias

msgaliasdelete(8)

delete a Messaging Server alias

msgaliaslist(8)

list attributes of a Messaging Server alias

msgaliaslistall(8)

list attributes of all Messaging Server aliases

msgaliasmigrate(8)

migrate mail alias file members to Messaging Server LDAP datastore

msgaliasremove(8)

delete a member from a Messaging Server alias

msgaliasreplace(8)

modify the restricted setting or the description of a Messaging Server alias

msgdomaincount(8)

list the names and descriptions of all Messaging Server mail domains

msgdomaincreate(8)

create a new Messaging Server mail domain

msgdomaindelete(8)

delete a Messaging Server mail domain

msgdomainlist(8)

list the description of a Messaging Server mail domain

msgdomainlistall(8)

list the descriptions of all Messaging Server mail domains

msgdomainmodify(8)

modify the description of a Messaging Server mail domain

msgimpsetup(8)

configure IMP mail client to work with the Messaging Server Cyrus server

msgldaphost(8)

configure the Messaging Server LDAP host

msgservicelist(8)

list the status of a Messaging Server system service

msgservicelistall(8)

list the status of all Messaging Server system services

msgsievebuild(8)

rebuild Messaging Server user mail filters

msguninstall(8)

remove the Messaging Server from a host system

msgusercreate(8)

create a new Messaging Server user

msguserdelete(8)

delete a Messaging Server user

msgusergetaliases(8)

list Messaging Server alias membership for a specified user

msguserisadmin(8)

determine admin privileges of a specified Messaging Server user

msguserlist(8)

list Messaging Server user attributes

msguserlistall(8)

list all Messaging Server users' attributes

msgusermigrate(8)

migrate */etc/passwd* members to Messaging Server LDAP datastore

msgusermod(8)

modify Messaging Server user attributes

msguserpw(8)

change a Messaging Server user's password

These utilities are called from the */opt/lsb-caldera.com-volution/msg/bin* directory. If you use them frequently, you might want to add */opt/lsb-caldera.com-volution/msg/bin* to your *PATH* environment variable. For more information, see their respective manual pages.

Warning

Many of these utilities form the back end for the administrative interface. This listing does not include those utilities in `/opt/lsb-caldere.com-volution/msg/bin` that should only be run by the administrative interface. Do not run the following utilities from the command line:

- **msgencrypt**
- **msgexec**
- **msggenclientconfig**
- **msginboxcreate**
- **msgroot**
- **msgvscan**

The admin Administrative Account

The Messaging Server has a single administrative account named *admin*. This is the name you use to log into the **Server Manager** for administering your messaging server. It is a valid mail account and can receive mail.

Note: Do not configure a local system account named *admin*; doing so will prevent the Messaging Server administrator from receiving mail.

The *admin* account is managed like other user accounts as described in "Managing Mail Users". You can also change the *admin* password by clicking on **Admin Password** under the **System** menu in the **Server Manager**.

Note: Before proceeding with Messaging Server configuration, we recommend that you change the initial *admin* password, set by default to "admin."

Importing User Data

The Messaging Server enables you to migrate user data from existing UNIX system mail configurations by converting existing data files into LDAP datastores. You can import:

- mailboxes
- users
- aliases

Note: In this Messaging Server release, user data can only be imported from UNIX and Linux systems. Future Messaging Server releases will include the capability of importing data from Microsoft® Windows and Exchange systems.

Importing Mailboxes

Existing mailboxes can be imported to the Messaging Server using any IMAP-capable mail client.

For existing IMAP mailboxes:

Mail client users can drag their IMAP mailbox from the previous server to the IMAP mailbox on the Messaging Server.

For existing POP mailboxes:

Once mail client users have downloaded their POP mail, they can upload it from their client to their Messaging Server IMAP mailbox.

Importing Users

Use the **msgusermigrate** migration utility to convert UNIX system */etc/passwd* entries to an LDAP datastore. To do so, copy the existing */etc/passwd* and */etc/shadow* files to a *tmp* directory on the Messaging Server system and run **msgusermigrate**. For more information, see the **msgusermigrate(8)** manual page.

Warning

Make sure that none of the UIDs in the imported */etc/passwd* file exist as system users on the Messaging Server system. Do not use the **msgusermigrate** utility in an attempt to create Messaging Server mailboxes for existing system users; doing so will result in failed mail delivery to the Messaging Server accounts. If you must have system users on your Messaging Server system, make sure that their Messaging Server UserID is different from their system uids.

Also, be sure that the imported */etc/passwd* does not contain an *admin* account. If you attempt to import a duplicate *admin* account, you might disable the Messaging Server.

We recommend that you carefully review the contents of the imported */etc/passwd* file before running the **msgusermigrate** utility.

Importing Aliases

Use the **msgaliasmigrate** migration utility to convert UNIX system mail alias file entries to an LDAP datastore. To do so, run the on an imported *aliases* file or the local */etc/mail/aliases* file. For more information, see the **msgaliasmigrate(8)** manual page.

System Settings

Changing the admin Password

You can use the **Server Manager** to change the password for the *admin* administrator account:

1. In the **System** menu, click on **Admin Password**.
2. Enter and confirm the new password value in the **Change Password** screen
3. Click on **Apply** to complete the change.

You can also change the *admin* password in the **View Users** but it is more direct to use this method in the **System** menu.

Managing Global User Access Privileges

You can use the **Server Manager** to set global access privileges for users in all mail domains controlled by the Messaging Server.

In the **System** menu, click on **User Access**. You can grant or deny these privileges globally:

Users can change their own password

Controls whether users can change the value of their mail account password via the Messaging Server admin user configuration interface.

Users can change their own profile

Controls whether users can change their profile parameters as described in "Managing mail users".

Users can create mail aliases

Controls whether users can create mail aliases within the Messaging Server directory using the **Server Manager** user configuration interface.

Managing Mail Services

The **Server Manager** allows you to view the status and perform certain actions on the Messaging Server component servers. In the **System** menu, click on **Mail Services** to view the list of configured services. Click on the service name to display its status, the PID of the active process, and the command that launched it. You can also take the following **Service Actions**:

- **cyrus** IMAP/POP Server

Start/Stop

Start or stop the server

- **docview** - OpenLinux Documentation Server

Start/Stop

Start or stop the server

Restart

Stop and restart the server

Reload

Reload DocView configuration files

- **ldap** - OpenLDAP Directory Server

Restart

Stop and restart the server

Note: Stopping the LDAP server disables the **Server Manager**; this can only be done manually.

- **postfix** - Mail Transport Agent (MTA)

Start/Stop

Start or stop the MTA

Restart

Stop and restart the MTA

Reload

Reload MTA configuration files

Mail services can also be controlled from the command line using standard **init** scripts:

```
/etc/rc.d/init.d/service [ start|stop|restart|reload ]
```

Enabling Webmail Service

The Messaging Server provides Webmail service with the IMP (Internet Messaging Program) webmail client and Horde framework, which are enabled by default. At installation, the Messaging Server:

- configures the **mysql** database engine to work with the horde database, which is used to store user information.
- sets the horde database password to the value of the *PW* attribute, which is stored in the *msg.conf(5)* file. The system administrator can change this password using the utility:

```
/usr/libexec/horde/database/dbpasswd.sh
```

Note: Later versions of the horde package might store this utility in */usr/lib/horde/database/dbpasswd.sh*

You will need this password if you want to make changes to your Horde or IMP configuration files.

- starts the **mysql** daemon and sets it to run by default.

Messaging Server users can access the IMP webmail client immediately by pointing their browsers at *http://hostname/horde/imp*, as described in "Enabling IMP Client Users".

To disable Webmail service:

1. Disable default **mysql** daemon startup by editing the */etc/sysconfig/daemons/mysql* file and changing the *ONBOOT* parameter to "no".
2. Stop the **mysql** daemon using either:

Webmin

In the **Servers** screen, click on **MySQL Database Server**, then click on **Stop MySQL Server**.

command line

Enter **/etc/rc.d/init.d/mysql stop**.

For more information, see the Horde and IMP documentation, available from the Messaging Server webpage in DocView.

Using Volution System Management Services

The Caldera Volution platform includes two system management and administration products that are compatible with the Messaging Server:

Volution Manager (VM)

This Web-based management system enables administrators to manage the network with profiles and policies, without having to individually manage each system. Based on LDAP directory services, it can be configured to provide hardware and software inventory, software distribution, health monitoring of systems, printer configuration and scripted scheduled actions. It consists of:

Volution Manager Server

A Caldera OpenLinux server system running VM Server software. This includes the computer creation daemon (**volitionccd**) which adds VM Client computers to the directory structure, the DENS daemon (**densd**) which acts as an event scheduler, and the software repository daemon (**volitionsrd**) which adds distributable package objects to the software repository.

Volution Manager Client

A Linux or UNIX system that can be managed by the VM Server. Each installed client runs the VM Client daemon (**volitiond**) which includes support for OpenSLP, the protocol the client uses to locate the VM Server.

Volution Manager Console

A browser-based interface used to perform management tasks. Once the VM Server and VM Clients are installed and configured, the VM Management Console is where Volution system management takes place.

Volution Online

A proactive, subscription package management system. It tracks thousands of RPM packages, tracks alerts against these packages, and facilitates updates to your systems.

Working With Volution Manager

Volution Manager and the Messaging Server can reside:

on the same machine

Both the Manager Server and Messaging Server Volution services can coexist on the same server, sharing the same OpenLDAP directory server. No special installation or configuration is required, simply run the Caldera installations for both products on the same system.

The Manager Client and Messaging Server can also coexist together on the same machine, facilitating simple remote management of the Messaging Server platform.

on different machines

The Manager Server and Messaging Server can also share the same OpenLDAP server but reside on different systems. In this configuration, the Messaging Server has to be configured to recognize a remote LDAP server as described in "Configuring a Remote OpenLDAP Server".

The Volution Manager and Messaging Server can work together to provide:

software distribution and maintenance

Volution Manager can be used to supply updates, patches, fixes, or advanced configuration changes to a Messaging Server system when the VM Client is installed on the same system.

system monitoring

Volution Manager can detect system problems on a Messaging Server system with the VM Client installed. Volution Manager can be configured to notify staff or take corrective action for a range of problems, such as poor network performance and approaching disk space limits. Many standard alerts are pre-configured with the Volution Manager product.

email alerts

Volution Manager can also be configured to notify administrators of problems using email messages. In this case, the Messaging Server can be used as the email server that delivers these

notifications to designated recipients. The Messaging Server can also redirect messages to Linux applications (such as a helpdesk application).

For more information, see the *Volution Manager Administration Guide*.

Chapter 3. Mail Administration

Managing Mail Domains

About Mail Domains

A *mail domain* is a name used for mail delivery that describes the site where a computer is located and generally includes the machine (host) name, a department (optionally), and the site's organization or country. In its default configuration, a system has exactly one IP address associated with each network interface and it has exactly one system name, which is also used as the mail domain name.

The default configuration for the Messaging Server assumes there is only one mail domain, with the same name as the system name, and one set of mail users who are addressed to that system name. This is sufficient for most simple mail systems.

The Messaging Server also enables *virtual domains*. You can create virtual domains if you want multiple mail domains presented from a single mail server. Messaging Server mail domains can be either attached to actual physical network interfaces or they can be virtual. There is no difference in how you configure them using the **Server Manager**. The only requirement is that all mail users and mail aliases under that domain must have addresses which are qualified by the domain's name. For example, if you create a virtual domain "*abc.com*" and create a mail account under that mail domain, the corresponding user must have an address of the form "*username@abc.com*".

Note: Creating a mail domain in the Messaging Server does not configure a new network address nor does it configure DNS for the domain names. It only configures the mail system to accept mail addressed to that mail domain. Network interfaces and name resolution can be managed efficiently with the **Webmin** interface; see the *Caldera OpenLinux System Administration Guide* for more information.

Configuring Mail Domains

In the **Server Manager**, click on these buttons in the **Domains** menu to:

View Domains

Lists the mail domains controlled by the Messaging Server.

Create Domain

Enter a mail domain name and description.

Delete Domain

Deletes the domain names you select.

The Messaging Server supports multiple mail domains, with user and alias lists displayed in per-domain views. To switch to a different domain, select it from the **Domain** box in the upper right of the screen.

Configuring Virtual Domains

Before configuring the Messaging Server for virtual domains, you must create mail exchanger (MX) records in DNS to resolve virtual domain names to the Messaging Server host machine. To update DNS, use the **Webmin** DNS/Bind Server Module as described in "Creating a Mail Exchanger Record" in the *Caldera OpenLinux System Administration Guide*.

You can then create mail domains with the **Server Manager** using the new virtual domain names.

Managing Mail Users

You can create and modify mail accounts for users who receive mail on the Messaging Server. The email account includes:

- general information for the user, such as the user's name, password, and telephone number.

- email addressing information, including the primary email address for the user and the option of forwarding their email to another user.
- a Cyrus inbox for the user.
- automatic reply information for extended absences.
- default filtering for unsolicited email (spam); this can be configured with the **msgusermod(8)** utility.

Note: If you have large numbers of users or aliases on your Messaging Server, it may take some time to load the **View** displays, and these displays may occupy many screens.

Postfix requires (as do most MTAs under requirement by RFC822) that an account for "*postmaster*" exists so that messages to the address "*postmaster@host.domain*" can be delivered successfully. Typically, the postmaster receives any error messages generated by Postfix. The postmaster mail alias is created automatically during installation with the "*admin*" administrator account as its sole member. This alias should not be deleted from the server.

Although a *postmaster* alias is configured by default in the default Messaging Server domain, it is not created automatically when you create new domains. You should therefore configure an alias for the address "*postmaster@host.newdomain*" that can be delivered successfully to a destination of your choice. For more information, see "Managing Mail Aliases"; make sure you set the the Domain selection box to the new domain.

See also "Managing global user access privileges".

Use the **Server Manager** to enter and modify mail account information. In the **Users** menu, click on:

- **View Users**
- **Find User**
- **Create User**
- **Delete User**

View Users

List all users in the selected mail domain, sorted by *User ID*. Clicking on the *User ID* link displays the user's complete account information. From this display you can take these **User Actions**:

- **Modify** the listed settings

- change the admin or user's **Password**. You can also change the *admin* password by clicking on **Admin Password** under the **System** menu in the **Server Manager**.
- view **Aliases** to which the user is subscribed
- **Delete** this user

Find User

Search for a user in the selected mail domain. You can enter a full or partial word to be found in the *User ID* or any of the *Name* fields. Click on the *User ID* links in the search results to display user information and take **User Actions**.

Create User

Create a new user. Required entries are marked with asterisks "*"; on some browsers, optional entries are displayed when you click on **More**.

*User ID

An identification name for the user which is unique for the entire messaging server (unique across all mail domains). This is the name with which the user will authenticate for IMAP or POP access. Example: *joes*.

Note: This name cannot be the same as any system user name.

First Name

The first name of the user (example: "Joe").

Last Name

The last name of the user (example: "Smith").

Note: A **Display Name** is created by default in the **View Users** menu from the first and last names.

***Mail address**

The primary Internet email address for the user. The mail domain is automatically set to the domain listed in the **Server Manager** toolbar. The name used here does not have to be the same as the **User ID**.

***Password**

The user's password used to authenticate for IMAP/POP/LDAP access. You must confirm the password you entered.

Work Phone

The business phone number of the user.

Mobile Phone

The mobile phone number of the user.

Home Phone

The home phone number of the user.

Pager

The pager number of the user.

FAX

The facsimile telephone number of the user.

Title

The job title for the user.

Office Location

The physical delivery office name for the user.

Alternate Mail

An alternate email address for the user. The email address must be qualified with the name of the mail domain under which the user resides, which is automatically set to the domain listed in the **Server Manager** toolbar.

Note: This field can only be modified using the **Server Manager**; users cannot do so.

Forward Mail To:

An email address to which to forward all the user's email.

When you have entered all required and optional information, click on **Create** to enter the new user account information.

Delete User

Select a *User ID* to delete. When you click on **Select**, all the associated user information is erased from the LDAP database. You can also delete users from the **View Users** display.

Caution

If you delete a user who is the last owner or member of an alias, the alias will be silently deleted. Before removing a user, we recommend that you see check their aliases; to do so, click on **Aliases** in their **View User** display. For this reason, we also recommend that every alias have at least two owners, and that important aliases also include the *admin* user as an owner or member.

You cannot delete the *admin* user.

Managing Mail Aliases

You can create and modify mail aliases on the Messaging Server. Mail aliases allow you to:

- use a single mail address to deliver mail to a group of users.
- deliver mail to a single user under a variety of user names.
- map one email address to another for purposes of mail routing.
- append mail to files for archival purposes.
- filter or process mail through programs.

Note: If you have large numbers of users or aliases on your Messaging Server, it may take some time to load the **View** displays, and these displays may occupy many screens.

Use the **Server Manager** to enter and modify mail alias information. In the **Aliases** menu, click on:

- **View Aliases**
- **Find Aliases**
- **Create Aliases**
- **Delete Aliases**

View Aliases

Lists all aliases in the selected mail domain, sorted by *Alias*. Clicking on the *Alias* link displays the complete alias information. From this display you can take these **Alias Actions**:

- **Modify** the **Description** and **Membership** settings
- add or remove alias **Members**; enter names or **Browse** user and alias lists
- add or remove alias **Owners**
- specify **Programs/Files** for the alias
- **Delete** this alias

Caution

If you delete a user who is the last owner or member of an alias, the alias will be silently deleted. Before removing a user, we recommend that you see check their aliases; to do so, click on **Aliases** in their **View User** display. For this reason, we also recommend that every alias have at least two owners, and that important aliases also include the *admin* user as an owner or member.

Find Aliases

Search for an alias in the selected mail domain. You can enter a full or partial word to be found in the *Alias* or *Name* fields. Click on the *Alias* links in the search results to display alias information and take **Alias Actions**.

Create Aliases

Create a new alias. Required entries are marked with asterisks "*"; on some browsers, optional entries are displayed when you click on **More**.

*Alias

An identification name for the alias which is unique for the entire messaging server (unique across all mail domains), appended with the name of the mail domain under which the alias resides. This mail domain is automatically set to the domain listed in the **Server Manager** toolbar.

Description

The description of the mail alias. Example: "The Company Glee Club".

*Owner

The email address(es) of owner(s) of the alias; there must always be at least one owner. By default, the user that creates an alias is automatically listed as an owner and a member, but this default does not apply to *admin* users, who must explicitly add themselves as owners or members if desired. Multiple owners are permitted, each of whom have the ability to modify alias attributes, add and remove owners, and delete the alias. Only existing owners can add or remove other owners; if an alias is restricted, only owners can add or remove members.

Note: We recommend that every alias have at least two owners, and that important aliases also include the *admin* user as an owner or member.

Membership

Radio buttons indicating whether the alias is **Open** or **Restricted**; the default is **Open**. Users can add or remove themselves to or from an **Open** alias, but a user cannot add or remove others from an

Open alias unless that user is also an owner. To add or remove themselves to or from **Restricted** aliases, users must ask an owner.

***Alias Member(s)**

The email address(es) of members of the alias. At least one member must be added, in a comma-separated list. Members can be entered as:

- **User IDs** (if in the current mail domain).
- aliases (if in the current mail domain). A mail alias can contain the names of other aliases.
- complete email addresses (if in a different mail domain).

In addition to manually entering individual names, you can also click on **Browse** to view lists of users and aliases in the current domain. To add a user or alias to the new alias, click on the plus sign (+) in **Add** column, and the user name will be added in the **Create Aliases** screen. Close the **Browse** window when you have finished selecting new members.

Append File

The path of a file on the system to which mail to this alias will be appended. This file must conform to Postfix specifications for the */file/name* value in alias database input files; see the Postfix *aliases(5)* manual page for further information. Mail cannot be appended to files owned by *root*. Only the *admin* user can set this attribute.

Pipe Program

A program through which to pipe a message sent to the alias. This command must conform to Postfix specifications for the */command* value in alias database input files; see the Postfix *aliases(5)* manual page for more information. Only the *admin* user can set this attribute.

Caution

If used improperly, setting the **Append File** and **Pipe Program** options can cause serious system problems, such as filesystem overruns and security breaches.

When you have entered all required and optional information, click on **Create** to enter the new alias information.

Delete Aliases

Select an *Alias* to delete. You can also delete users from the **View Aliases** display.

Backup and Restore

Backing Up the Messaging Server

To protect users against accidental file deletion and catastrophic system failures, backups of the Messaging Server should be performed regularly. Particular care should be taken to make regular (and multiple) backups of the file `/var/imap/mailboxes.db`. See the discussion under "Mail Directory Recovery" below for more information.

Linux backup utilities such as **tar**(1), **cpio**(1L), and **afio**(1) may be used to backup and restore the Messaging Server. Commercial backup products are also available, which offer many additional features including faster restore. The current list of supported backup products can be found in the *Late News* document on the Messaging Server documentation website:

<http://www.caldera.com/support/docs/volution/msg>

Caution

To avoid synchronization problems, we recommend that you disable the **cyrus** service while performing the critical backup of the *mailboxes.db* file. The cyrus service can be stopped and restarted using the **Server Manager** or from the command line with the `/etc/rc.d/init.d/cyrus` script.

Restoring Accidentally Deleted Email

To restore a specific user's email, simply restore the contents of the directory `/var/spool/imap/user/UserID`, where *UserID* is the Messaging Server unique identifier for that

user. After restoring the directory, you must run the command:

```
su cyrus -c /usr/cyrus/bin/reconstruct
```

This will inform the Messaging Server that old email has been restored and should now made visible to users.

See also the **reconstruct**(8) manual pages.

Mail Directory Recovery

This section describes how to perform disaster recovery on the various databases used by the Cyrus IMAP component of the Messaging Server. Inconsistencies can occur in these databases in the event of an unforeseen event such as a system crash.

Should a mail system failure occur, first view the log files and try to determine what went wrong. Of particular interest are the files:

- */var/log/imapd*
- */var/log/messages*
- */var/log/mail*

The Messaging Server provides special tools needed to recover the IMAP databases. All of the tools described below can be found in the */usr/cyrus/bin/*.

Reconstructing Mailbox Directories

The largest databases in the Messaging Server are stored in mailbox directories. By default the Messaging Server mailbox directories are found under */var/spool/imap/user/**user_name***.

Each mailbox directory contains message files. There is one message file for each message stored on the IMAP server. The name of each message consists of the message's unique identifier number, followed by a dot (.).

In addition to the message files, each mailbox directory also may contain the files *cyrus.header*, *cyrus.index*, *cyrus.cache*, and *cyrus.seen*. Each of these files contains additional information about the mailbox which is used by the Cyrus IMAP server.

The **reconstruct** utility is used to recover from mailbox directory corruption. An administrator can recover from a damaged disk by restoring message files from a backup and running the **reconstruct** command to regenerate what it can of the other files. By default, **reconstruct** acts on all of the mailbox directories on the system. After running **reconstruct**, you should also run **quota -f** as described below.

See also the **reconstruct**(8) and **quota**(8) manual pages.

Reconstructing Quota Roots

The *quota* subdirectory is found by default on the Messaging Server as */var/imap/quota/*. This directory contains one file per quota root, with the file name being the name of the quota root. These files store the quota usage and limits of each of the quota roots. For more information, see "Setting Cyrus Mailbox Quotas".

The **quota** program, when invoked with the **-f** switch, recalculates the quota root of each mailbox and the quota usage of each quota root.

You may wish to remove a quota root. To do so, remove the quota root's file, then run **quota -f** to make the quota files consistent again.

See also the **quota**(8) manual page.

Restoring the Mailbox List Database

The mailboxes file, */var/imap/mailboxes.db*, is the most critical file in the Cyrus IMAP system. It contains a sorted list of each mailbox on the server, along with the mailboxes *quota root* and *ACL*. The

command **ctl_mboxlist -r** can be used to restore a mailbox's database file if it becomes corrupt. Should that fail, a copy of the *mailboxes.db* file is saved in the */var/opt/lsb-caldera.com-volution/msg/* directory every time a cyrus mailbox is created, deleted, or modified by any of the Messaging Server tools. Should all else fail, you may restore this copy to the */var/imap* directory and run **ctl_mboxlist -r**.

See also the **ctl_mboxlist(8)** manual page.

Restoring Subscription Files

The subdirectory */var/imap/user* of the configuration directory contains user subscriptions. There is one file per user, with a filename of the userid followed by the suffix *.sub*. Each file contains a sorted list of subscribed mailboxes.

There is no program to recover from damaged subscription files. You may recover from lost files simply by restoring from backups.

Chapter 4. Calendar Administration

The Messaging Server includes support for the Microsoft Outlook "free/busy" calendar feature. When scheduling a meeting or other activity, this feature allows the person who is scheduling the meeting to see when others are free or busy.

Note: This feature is provided for Microsoft Outlook clients but not Outlook Express.

If you require more extensive calendar services, the Messaging Server is compatible with commercial calendar server products. See the current list of supported calendar software packages in the *Late News* document on the Messaging Server documentation website:

<http://www.caldera.com/support/docs/volution/msg/>

ftp Server "Shared Calendar Space"

Microsoft Outlook has the ability to distribute calendar data by storing an individual's "free/busy" information in a publicly shared directory. The shared directory is specified in Outlook as an *http://* or *ftp://* reference. When an individual publishes their "free/busy" information, it is written into a file (identified by the user's account name) in the referenced directory. When the same individual re-publishes updated "free/busy" information, their file in the shared directory is overwritten.

Note: Before Outlook "free/busy" information can be published, the Microsoft Internet Explorer Web Publishing Wizard add-on component must be installed on the client system. For more information, see the Microsoft Knowledge Base article:

<http://support.microsoft.com/support/kb/articles/Q291/6/21.ASP>

The Messaging Server provides a pre-configured protected shared directory for use with the Outlook "free/busy" feature. It is configured by default when the **Outlook Configuration Tool** is run (see "Enabling Outlook Client Users"). The **Outlook Configuration Tool** configures these "free/busy" parameters:

Publish at this URL

```
ftp://userid:password@hostname/pub/calendar/%NAME%.vfb
```

Search at this URL

```
http://hostname/calendar/%NAME%.vfb
```

- **userid** is the user's Messaging Server login name
- **password** is their Messaging Server password
- **hostname** is the Messaging Server IP hostname

%NAME% is a macro used by Outlook to substitute for the name portion of the user's email address (everything up to but not including the @ character) when publishing or searching for "free/busy" files:

- The first occurrence of **%NAME%** in the publication URL is used to publish to the shared directory on the Messaging Server using **ftp**. The **ftp** service is configured to validate user access using the Messaging Server's LDAP directory, which ensures that only valid mail users have access to this directory.
- The second occurrence of **%NAME%** in the publication URL is used to form the filename in which the user's "free/busy" data is stored. For example, if the mail user Tom has enabled the publication of his "free/busy" information, it will be written to the filename of *Tom.vfb*. Since the local name part of the email address is required to be unique across all mail domains within the Messaging Server, this avoids namespace conflicts of user "free/busy" data.
- The occurrence of **%NAME%** in the search URL is used to locate "free/busy" information for a user that has been invited to a meeting. For example, Tom invites Betty to a meeting. Outlook would then search for the file *Betty.vfb*, which contains the "free/busy" information for Betty.

Enabling Client Free/Busy Publication

Although the "free/busy" publication and search URL's are set by default, the actual publication of an

individual's "free/busy" information is not enabled. This decision has been left to the individual user. If the user wishes to enable publication of their "free/busy" information, they can do so within the Outlook **Free/Busy** configuration dialog:

1. In the Outlook **Tools**, click on **Options**, then **Calendar Options**.
2. In the **Free/Busy Options** dialog box, check **Publish my free/busy information**.
3. Enter your Messaging Server password in the *ftp://URL* in place of the string `password_for_yourname_here`.
4. Click on **Apply** to complete the procedure.

Chapter 5. Managing Clients

Client Administration

Mail client software must be configured to authenticate with and receive messages from the Messaging Server. Configuration procedures are explained in "Enabling mail client users", with instructions for mail client users to run client configuration tools on their personal systems.

Once mail client software is configured and mail accounts created as described in "Managing mail users", mail users can set their own mail preferences with the **Preferences Manager** as described in "Managing client preferences". See also the *Client User's Guide*.

Most mail client software allows multiple mailboxes. That is, a mail client user could access several mail accounts from the same mail client and manage the mailboxes separately. The guidelines in Messaging Server documentation for configuring mail clients assume that only Messaging Server accounts will be configured on the client. Although other mail accounts can be created or might already exist, you might want to set a policy regarding your support of multiple accounts.

Enabling Mail Client Users

To enable a mail client user to access their mail from a Messaging Server server:

1. Create a Messaging Server email account as described in "Managing mail users".
2. In some cases, you must inform users whether to select **IMAP** or **POP** in the server configuration selection screens.
3. Provide this account information to the user so they can access the **Preferences Manager** and configure their mail client software.
4. If you are migrating existing mail users to a Messaging Server installation, you might need to inform them of potential changes to the appearance and behavior of their mail client software.

Follow the instructions in this section to enable these mail clients:

- Outlook and Outlook Express
- Netscape Messenger
- Eudora Mail
- KMail
- IMP webmail

Note: Online Help screens in the **Preferences Manager** provide detailed configuration instructions from the *Client User's Guide*. These instructions are derived from information presented in the following sections.

Enabling Outlook Client Users

Both Outlook and Outlook Express can be configured to use the mail and LDAP directory services of the Messaging Server. Outlook Express is mainly a mail client and is distributed as a component of Internet Explorer, which is included with Microsoft Windows operating systems. Outlook is a full-featured messaging and collaboration client application that is also included with MS Windows operating systems. Under normal circumstances, only one of these clients is used at a time, although they can be run simultaneously.

A Messaging Server **Outlook Configuration Tool** is available to automatically configure these clients.

General Outlook Client Requirements

Before running the **Outlook Configuration Tool**, the client MS Windows system must have:

- networking installed and configured.
- Internet Explorer 5 or greater.
- no running copies of Outlook.

No special configuration is required for Outlook Express.

Outlook 2000 and Outlook 98 Requirements

Outlook 2000 and Outlook 98 can be installed in three configurations:

1. no email
2. Internet Email Only
3. Corporate/Workgroup

You must configuring Outlook 2000 for Internet Email Only mode; the Corporate/Workgroup configuration is not supported in this Messaging Server release.

For more information regarding use of Outlook 2000 features, refer to your Microsoft documentation. In addition, the Microsoft Knowledge Base article Q197636 describes using Outlook 2000 with an IMAP4 server. See also the Microsoft document *Microsoft Outlook 2000 Features and Configuration Guide* available on the Microsoft website at <http://www.microsoft.com/office/outlook/>

Outlook Client Configuration Tool

The **Outlook Configuration Tool** can detect and configure both Outlook and Outlook Express clients. When a user downloads the **Outlook Configuration Tool** from the **Preferences Manager**, a custom configuration data file for that user is generated and downloaded with the configuration program. This data file contains email address, directory binding, and calendar information specific to the user who downloads it.

The **Outlook Configuration Tool** stores user email account passwords in the "*LDAP - Messaging Server*" Internet Account. The password is used when Outlook or Outlook Express clients query Messaging Server for email address information. If a mail account password is changed on the Messaging Server, the password must also be changed in the Outlook and Outlook Express "*LDAP - Messaging Server*" directory configuration. In addition, if the user has manually configured the "*Internet email - Messaging Server*" Internet Account to remember their email account password when sending/receiving email with the Messaging Server, the user will also need to update the password in the "*Internet email - Messaging Server*" Internet Account.

The **Outlook Configuration Tool** configures two Internet Accounts for Outlook Express clients:

- *Internet email - Messaging Server*
- *LDAP - Messaging Server*

The **Outlook Configuration Tool** prepares Outlook clients in Internet Email Only mode by configuring two Internet Accounts

- *Internet email - Messaging Server*
- *LDAP - Messaging Server*

Note: The **Outlook Configuration Tool** does not alter existing mail accounts. If any existing accounts need to be modified or removed, this must be done manually.

The **Outlook Configuration Tool** will also create a shortcut on the Desktop and a shortcut in the Outlook shortcut bar which when clicked will bring up a browser window that displays the main screen of the Messaging Server user interface.

For Outlook and Internet Explorer 5.0 (and later), a button that launches the Messaging Server user interface in the browser window is added to the toolbar and to the **Tools** menu.

When the Outlook configuration program completes, it will remove itself from the system.

Managing Outlook Client Configuration

If the user's mail client has not already been configured for the Messaging Server, instruct them to do so:

1. Close Outlook or Outlook Express if you are currently using it.
2. Log into **Preferences Manager** by pointing your browser at:
http://hostname/msg
where *hostname* is the system name supplied by the mail administrator for **Preferences Manager** access.
3. Enter your mail account name and password when the **Preferences Manager** screen appears.
4. Click on the **Client Setup** in the **Preferences** menu. This displays configuration information used by your mail client software to communicate with the Messaging Server.

5. Run the client configuration program by clicking the **Configure** button. The client configuration screen includes instructions on how to respond to further prompts.
6. In the **File Download** dialogue window, select **Open this file from its current location**.
7. When prompted to configure your system with the Messaging Server, click on **Yes**.
8. After a short time, you are informed that Outlook is being started. If this is the first time Outlook has been run on your system, you will be prompted to select a networking mode; select **Internet Email Only**. If you are prompted to create an email account, click on **Cancel** or **Close** to exit the account creation dialog; it is not necessary to configure an account at this time.
9. After a short time, you are informed that Volution Messaging Server Com-Addin files are being copied to your system. You are then prompted to close Outlook if it is still running. Click on **OK** to continue.
10. When prompted to install the Volution Messaging Server Com-Addin, click on the large square **Install** button to do so.

This completes mail client configuration. When you start your Outlook client, you will be able to receive email with your new account.

Note: When you first start Outlook XP after configuring Messaging Server support, answer "Yes" when prompted to import mail account information. Otherwise, your mail accounts will not be available .

You must also instruct mail users to set mail preferences with **Preferences Manager** as described in "Managing client preferences".

Enabling Netscape Messenger Client Users

Netscape Messenger can be configured to use the mail and LDAP directory services of the Messaging Server. The Messaging Server also supports Netscape Address Book; for more information, see Netscape Help.

If the user's mail client has not already been configured for the Messaging Server, instruct them to do so:

1. Close Netscape Messenger if you are currently using it.
2. Log into **Preferences Manager** by pointing your browser at:
http://hostname/msg
where *hostname* is the system name supplied by the mail administrator for **Preferences Manager** access.
3. Enter your mail account name and password when the **Preferences Manager** screen appears.
4. Click on the **Client Setup** in the **Preferences** menu. This displays configuration information used by your mail client software to communicate with the Messaging Server. Keep this screen available or print its contents.
5. Start Netscape Messenger.
6. In the **Edit** menu, select **Preferences**, then open **Mail & Newsgroups**.
7. In the **Identity** preferences panel of **Mail & Newsgroups**, enter your user information in the boxes. The *Your name* and *Email address* fields are required, and the *Your name* field in Netscape Messenger must have the same contents as the *Name* field in the **Client Setup** display.
8. In the **Mail Servers** preferences panel of **Mail & Newsgroups**, click on **Add** under **Incoming Mail Servers** to add the Messaging Server machine.

- a. Under the **Mail Server Properties General** panel:

Server Name

enter the machine name on which the Messaging Server resides.

Server Type

select *IMAP Server* or *POP3 Server*.

User Name

enter the *Account name* from the **Preferences Manager** client configuration display.

- b. If you selected *IMAP Server*, under the **Mail Server Properties Advanced** panel:

IMAP service directory

enter **user.name**, where *name* is the value you entered for *User Name*.

9. In the **Mail Servers** preferences panel of **Mail & Newsgroups** under **Outgoing Mail Server**:

Outgoing mail (SMTP) server

enter the machine name on which the Messaging Server resides.

Outgoing mail server user name

enter value you entered for *User Name*.

This completes mail client configuration. When you restart Netscape Messenger, you will be able to receive email with your new account.

Note: For Netscape Messenger Release 4.7, there is no Messaging Server support for using the Messaging Server LDAP directory for roaming access.

You must also instruct mail users to set mail preferences with **Preferences Manager** as described in "Managing client preferences".

Enabling Eudora Mail Client Users

If the user's mail client has not already been configured for the Messaging Server, instruct them to do so:

1. Close Eudora Mail if you are currently using it.
2. Log into **Preferences Manager** by pointing your browser at:
http://hostname/msg
where *hostname* is the system name supplied by the mail administrator for **Preferences Manager** access.
3. Enter your mail account name and password when the **Preferences Manager** screen appears.
4. Click on the **Client Setup** in the **Preferences** menu. This displays configuration information used by your mail client software to communicate with the Messaging Server. Keep this screen available or print its contents.

Further configuration depends upon whether they are:

- configuring their Eudora client for the first time.
- reconfiguring their Eudora client for the Messaging Server.

Initial Configuration With the Eudora Setup Wizard

The first time Eudora is launched, the **Eudora New Account Setup Wizard** will appear. Proceed through the setup screens, entering information as requested and clicking on **Next** to continue.

1. In the **Account Settings** screen, select **Create a brand new email account**.
2. In the **Personal Information** screen, enter **Your Name** from the **Name** field in the **Preferences Manager Client Setup** display.
3. In the **Email Address** screen, enter the **Email Address** from the **Preferences Manager Client Setup** display.
4. In the **Login Name** screen, enter **Login Name** from the **Name** field in the **Preferences Manager Client Setup** display.
5. In the **Incoming Email Screen** screen:
 - enter **Incoming Server** from the **Server Name** field in the **Preferences Manager Client Setup** display.
 - select **POP** or **IMAP** according to administrator guidelines.

If **IMAP** is selected, an **IMAP Location Prefix** screen will be displayed. Leave the **Location Prefix** box blank.

- select **Never** from the **Secure Sockets when Receiving** list.
6. In the **Outgoing Email Screen** screen:
 - enter **Outgoing Server** from the **Server Name** field in the **Preferences Manager Client Setup** display.
 - select **Never** from the **Secure Sockets when Receiving** list.
 7. Click on **Finish** to complete configuration and exit the **Setup Wizard**. When you restart Eudora, you will be able to receive email with your new account.

Modifying Eudora Configuration

1. In the Eudora **Tools** menu, select **Options**.
2. Click on **Getting Started**, then enter:

Real Name

from the **Name** field in the **Preferences Manager Client Setup** display.

Return Address

from the **Email Address** field in the **Preferences Manager Client Setup** display.

Mail Server

from the **Server Name** field in the **Preferences Manager Client Setup** display.

Login Name

from the **Account Name** field in the **Preferences Manager Client Setup** display.

SMTP Server

from the **Server Name** field in the **Preferences Manager Client Setup** display.

Allow Authentication

check the box (this should be the default).

3. Click on **Checking Mail**, then enter:

Mail Server

from the **Server Name** field in the **Preferences Manager Client Setup** display.

Login Name

from the **Account Name** field in the **Preferences Manager Client Setup** display.

Secure Sockets when Receiving

select **Never**.

other fields

use defaults.

4. Click on **Incoming Mail**, then enter:

Server Configuration

select **POP** or **IMAP** according to administrator guidelines.

Authentication Style

select **Passwords**.

other fields

use defaults.

5. Click on **Sending Mail**, then enter:

Return Address

from the **Email Address** field in the **Preferences Manager Client Setup** display.

SMTP Server

from the **Server Name** field in the **Preferences Manager Client Setup** display.

Secure Sockets when Receiving

select **Never**.

other fields

use defaults.

6. Click on **OK** to complete configuration and exit. When you restart Eudora, you will be able to receive email with your new account.

Enabling KMail Client Users

If the user's KMail client has not already been configured for the Messaging Server, instruct them to do so.

1. Close KMail if you are currently using it.
2. Log into **Preferences Manager** by pointing your browser at:

http://hostname/msg

where *hostname* is the system name supplied by the mail administrator for **Preferences Manager** access.

3. Enter your mail account name and password when the **Preferences Manager** screen appears.
4. Click on the **Client Setup** in the **Preferences** menu. This displays configuration information used by your mail client software to communicate with the Messaging Server. Keep this screen available or print its contents.
5. Log into your Caldera OpenLinux system and start KMail. If this is the first time KMail has been run, click on **OK** to create a *Mail* subdirectory in your home directory.
6. In the KMail **Settings** menu, select **Configuration** .
7. Click on **Identity**, then click on **New Identity**. Enter **New Identity** from the **Account Name** field in the **Preferences Manager Client Setup** display, and select "**With empty fields**".
8. When your **New Identity** is displayed, enter:

Name

from the **Name** field in the **Preferences Manager Client Setup** display.

Email Address

from the **Email Address** field in the **Preferences Manager Client Setup** display.

Reply To Address

from the **Email Address** field in the **Preferences Manager Client Setup** display.

Signature

specify a file or enter a signature message in the box.

Click on **Apply** to save your selections in the **Identity** screens.

9. Click on **Network** and **Sending Mail**, then select:

SMTP

Enter **Server** from the **Server Name** field in the **Preferences Manager Client Setup** display, and use the default port number (unless instructed otherwise by your mail administrator).

Incoming Mail

Select **Pop3**, then enter:

Name

from the **Name** field in the **Preferences Manager Client Setup** display.

Login

from the **Account Name** field in the **Preferences Manager Client Setup** display.

Password

of your choice; you can elect to have KMail remember this password.

Host

from the **Server Name** field in the **Preferences Manager Client Setup** display.

Port

use the default.

other fields

Enter additional information as desired.

Click on **Apply** to save your selections in the **Network** screens.

10. Set **Network Properties** as desired and click on **Apply** to save your selections in the **Network** screens.
11. Click on **OK** to complete configuration and exit. When you restart KMail, you will be able to receive email with your new account.

Enabling IMP Webmail Client Users

IMP client users do not need to enter configuration information from the **Preferences Manager Client Setup** display. To log into the IMP webmail client, they need only know:

- their Messaging Server account name and initial password.

- their Messaging Server email address.
- the IMP client URL, usually:

*http://**hostname**/horde/imp*

If the user's IMP account has not already been configured for the Messaging Server, instruct them to do so:

1. Log into IMP by pointing your browser at:

*http://**hostname**/horde/imp*

2. Enter your account name and password.
3. Click on **Preferences** and enter your Messaging Server account name and email address.

This completes IMP client configuration. To view and modify your Messaging Server user preferences, log into **Preferences Manager** by pointing your browser at:

*http://**hostname**/msg*

where ***hostname*** is the system name supplied by the mail administrator for **Preferences Manager** access. When you enter your mail account name and password, you will see the **Preferences Manager** screen.

Managing Client Preferences

Mail client users can set their own mail preferences with **Preferences Manager**. When they log in with a valid mail account name and password, they are presented the same user preferences as displayed on the administrative screens, although no other configuration options are presented:

- **Preferences**
- **Users**
- **Aliases**

You must instruct users on using **Preferences Manager** to set mail preferences:

1. Close your email client software.
2. Log into **Preferences Manager** by pointing your browser at:
http://hostname/msg
where **hostname** is the system name supplied by the mail administrator for **Preferences Manager** access.
3. Enter your mail account name and password when the **Preferences Manager** screen appears.
4. Enter, modify or display your email options.
5. When you have completed email configuration, click the **Logout** button to exit **Preferences Manager**. Your new or modified preferences will be in effect the next time you start your email client.

Help screens are also available from the user preferences page.

Preferences

Your Profile

Displays your personal information. To modify it, enter or edit the desired fields, and click the **Apply** button to enter your changes.

Forward email

When set, forwards your email to the address you enter in the box.

- To forward your mail, enter an email address and click on **Apply**.
- To disable forwarding, erase the contents of the box and click on **Apply**.

Vacation email

When set, sends a vacation message; that is, an automatic reply for all email you receive during a vacation or extended absence. A list of messages sent is also maintained.

- To enable vacation email, click on **Vacation email on**. You can also customize the subject heading and content of your vacation message. If you do not enter a subject or content, the

following defaults are set:

Subject

Absence notification

Message

This is an automated reply: This person is temporarily out of the office

- To disable forwarding, click on **Vacation email off**. You may also want to clear your list of messages sent.

Note: Whenever you make a change to your vacation notification, it can take up to an hour for the change to propagate. Updates to user profiles are run by default on an hourly **cron** job.

Change Password

To change your password, enter your old password, enter a new password, retype the new password, and click on **Apply**.

Client Setup

Displays information required by clients to communicate with the Messaging Server. Clicking the **Configure** downloads this information to your email client.

Note: Downloading Outlook configuration information is usually performed only once per user. Outlook client users should not repeat this step unless instructed to do so.

Users

Find Users

Allows you to search for users based on *UserId*, *Name*, and *Email Address* fields, and you can enter partial strings. You can also browse the complete list of email users by clicking the **Show**

All. For each account listed, you can view their profile and aliases to which they subscribe.

Aliases

Your Aliases

Displays aliases for which you are the Owner or a Member.

Find Aliases

Allows you to search for aliases or browse a list of available aliases. You can also browse the complete list of email aliases by clicking the **Show All**.

Create Alias

Allows you to create aliases.

Chapter 6. Security

Avoiding Unsolicited Email

The Messaging Server provides the following protection against unsolicited email (or "*spam*"):

built-in defaults

The Messaging Server includes a simple built-in filter that diverts any mail not directly addressed to a Messaging Server user or alias. Diverted mail can be sent to a folder or destroyed. This eliminates messages sent as Blind CC (bcc), a major delivery vehicle for unsolicited email. This filter is activated by the **msgaclset** utility for any user who is added to the system. The filter and exception lists can also be managed for individual users using the **msgusermod** utility. See the **msgaclset(8)** and **msgusermod(8)** manual pages for more information.

Postfix UCE configuration

By default, the Postfix SMTP server only accepts mail from or to the local network or domain, or to domains that are hosted by Postfix. This prevents your system from being used as a mail relay to forward bulk mail from unknown sources.

You can also implement UCE (unsolicited commercial email) policies that prevent such email altogether; for example, you can configure Postfix to use RBL (real-time blackhole list) name servers. For more information, see "Postfix Configuration - UCE Controls" in the *Wietse's Postfix Project* documentation.

Avoiding Viruses

Integrating Anti-Virus Software

The Messaging Server provides integration with anti-virus software. To enable supported anti-virus

software:

1. Install the anti-virus software.
2. Edit the `/etc/opt/lsb-caldere.com-volution/msg/vscan.conf` file and remove the comments appropriate to your anti-virus software.

For more information, see:

- the `vscan.conf(5)` manual page
- the current list of supported anti-virus software packages in the *Late News* document on the Messaging Server documentation website:
<http://www.caldere.com/support/docs/volution/msg>
- your anti-virus software product documentation

Filtering Incoming Email

Postfix provides support for filtering the headers of incoming mail messages. In addition to routine message sorting, this can be useful in the early stages of a virus' distribution when the subject heading is known but anti-virus checking software has not been updated to protect against it.

Postfix MTA can protect against such attacks using a "header_checks" file. For example, to block all messages with the subject header ILOVEYOU from being received or propagated:

1. Create the file `/etc/postfix/header_checks` with the contents:

```
/^Subject: ILOVEYOU/ REJECT
```

2. Change the file ownership to the `postfix` account:

```
chown postfix /etc/postfix/header_checks
```

3. Then modify the file `/etc/postfix/main.cf` to include:

```
header_checks = regexp:/etc/postfix/header_checks
```

4. Restart Postfix using either:

Server Manager

In the **System** menu, click on **Mail Services**, then click on **Reload** in the **postfix** display.

command line

Enter:

```
/etc/rc.d/init.d/postfix reload
```

Enabling SSL

The Messaging Server provides SSL (Secure Socket Layer) configuration by default. That is, **https** can be used immediately using demonstration keys, and should be used to provide secure web connections.

However, many SSL benefits are not available without a signed certificate and key. These can be obtained:

- from commercial Certificate Authority (CA) providers, using **Webmin** to generate a Certificate Signing Request (CSR) .
- using **Webmin** to generate a self-signed certificate and key.

We recommend using commercial products, because they guarantee unique certificates, and they provide legal protection. Nonetheless, self-signed certificates are adequate for many installations.

Both self-signed certificates and CSRs can be managed with **Webmin**. In the **Webmin** interface, select **System** and **Certificate and Key Management**. Then select either:

Generate Key and Certificate Signing Request (CSR)

Use the defaults provided and fill out other forms as desired. The Common Name field must match the Messaging Server address. When you receive the signed certificate and key from the Certificate Authority, you must import it using the **Webmin Import Key or Signed Certificate** facility.

Generate Self Signed Certificate and Key

Use the defaults provided and fill out other forms as desired. The Common Name field must match the Messaging Server address. When you generate the key, you will be prompted to overwrite the demonstration keys in the */etc/ssl/private* directory; you can safely do so.

Once you have acquired or generated a key, you must provide the Cyrus and Postfix services with read/write access to the key. Assuming that the new key is */etc/ssl/private/hostkey.pem*, enter:

```
cd /etc/ssl

cp private/hostkey.pem cyrus-key.pem

chown cyrus cyrus-key.pem

chmod 600 cyrus-key.pem

cp private/hostkey.pem postfix-key.pem

chown postfix postfix-key.pem

chmod 600 postfix-key.pem
```

For more information about SSL configuration, see "4.8. Using Certificate and Key Management" in the *Caldera OpenLinux System Administration Guide*.

Chapter 7. Managing Messaging Server Components

The Messaging Server installation sets initial configuration parameters for Messaging Server components. For most simple mail configurations, it is not necessary to alter these initial values or to configure Messaging Server components directly. The **Server Manager** enables you to manage most of the basic Messaging Server functionality, including mail administration of mail domains, mail accounts, mail aliases, and other general Messaging Server system settings as discussed in "System settings" and "Mail administration". In addition to its ease of use, we recommend using the **Server Manager** whenever possible because it is less error-prone than editing files directly.

Nonetheless, the Messaging Server supports advanced component configuration for customized installations. To configure the many features available for OpenLDAP, Postfix, and Cyrus, consult the individual documentation available for each configurable component. The following sections cover only those features directly managed by the Messaging Server and any integration issues which affect the operation of the Messaging Server:

- OpenLDAP
- Postfix
- Cyrus

For more information, see their respective documentation, available from the Messaging Server webpage in DocView.

Advanced OpenLDAP Configuration

This section discusses:

- OpenLDAP configuration parameters
- relocating the OpenLDAP database
- configuring a remote OpenLDAP server
- configuring an alternative LDAP server

Caution

These are advanced configuration procedures that require extensive LDAP knowledge and experience.

OpenLDAP Configuration Parameters

The configuration file for OpenLDAP is `/etc/ldap/slapd.conf`. It is configured for operation with the Messaging Server upon installation. We recommend that you *do not* alter this configuration. In particular, changing the access directives defined for the Messaging Server database might disable the Messaging Server and the **Server Manager**. For more information, see the `slapd.conf(5)` manual page.

Note: The `/etc/ldap.conf` file is the configuration file for the LDAP PAM module and is configured for use with the Messaging Server. Do not change the settings in this file.

Relocating the OpenLDAP Database

By default, OpenLDAP is installed with its database in the directory `/var/ldap/openldap-ldbm`. You can relocate the queue to a different filesystem, although we recommend that you do so before configuring the Messaging Server and enabling mail delivery.

To relocate the OpenLDAP database before the Messaging Server is enabled:

1. Shut down the LDAP directory server:

```
/etc/rc.d/init.d/ldap stop
```

2. Copy the existing database to the new location. Use the **cp -p** flag to maintain the proper permissions and ownership of files and directories. For example:

```
mkdir -p /new/location  
cp -pR /var/ldap/openldap-ldbm /new/location
```


3. Set the *directory* parameter in */etc/ldap/slapd.conf* to the new path for the database and comment out the old path. For example:

```
# relocated OpenLDAP database for Messaging Server use
# directory      /var/ldap/openldap-ldbm
directory        /new/location
```

4. Start OpenLDAP:

```
/etc/rc.d/init.d/ldap start
```

Configuring a Remote OpenLDAP Server

To configure a remote LDAP server:

1. Install the Messaging Server on the remote server.
2. On the remote server, run the command:

```
/opt/lsb-caldera.com-volution/msg/bin/msgldaphost
```

This will provide information about server passwords and user entities specific to the remote server.

3. On the local system, run the same **msgldaphost** command to set the system to point to the remote host, and to specify passwords and user entities.

For more information, see the **msgldaphost(8)** manual page.

Configuring an Alternative LDAP Server

The Messaging Server can be configured to use a directory server other than OpenLDAP; for example, the Sun® iPlanet and Novell® eDirectory directory servers. To do so, you will need information

contained in:

schema files

Schema files for the Sun iPlanet and Novell eDirectory directory servers are installed in the */etc/ldap/schema/netscape* and */etc/ldap/schema/nds* subdirectories.

LDIF files

An LDIF (LDAP Data Interchange Format) file containing additional information about the required directory content and structure is stored on installed systems as */etc/opt/lsb-caldera.com/volution/msg/ldif.base*. See also the *ldif(5)* manual page.

slapd.conf

The */etc/ldap/slapd.conf* file contains useful information on the ACL's (Access Control Lists) enforced by the Messaging Server. See also the *slapd.conf(5)* manual page.

When you have assembled the required information, run the **msgldaphost** command as described in "Configuring a Remote OpenLDAP Server". For more information, see the **msgldaphost(8)** manual page.

Advanced Postfix Configuration

This section discusses:

- Postfix configuration parameters
- relocating the Postfix message queue

Postfix Configuration Parameters

Postfix configuration is controlled by parameters in the */etc/postfix/main.cf* file. Although there are around 100 parameters, they are set to reasonable defaults (by default or by the Messaging Server

installation) and do not require modification. The Messaging Server supports advanced Postscript configuration, but note the constraints on the following parameters:

alias_maps

Specifies the list of alias databases used by the local delivery agent. For the Messaging Server, this is defined to look up aliases stored in the LDAP directory. Normal Postfix alias files cannot be used with the Messaging Server, because Postfix has been altered for the Messaging Server to look up the entire address instead of just the local part. For example, if mail were to be sent to "*alias@foo.com*", the entire address "*aliasname@foo.com*" would be looked up in the aliases databases instead of just "*aliasname*". This is controlled by the postfix *domain_in_alias* parameter, which must be set to the value "yes" for correct operation of the Messaging Server.

bounce_notice_recipient

2bounce_notice_recipient

delay_notice_recipient

error_notice_recipient

Specify the recipient for *postmaster* notices for the various errors that Postfix can report, based upon the *notify_classes* parameter configuration. Although Postfix assigns a default value of "postmaster" to these parameters if they are not configured, these parameters must be explicitly set for the operation of the Messaging Server. The **Server Manager** configures these parameters.

Note: We recommend that you not edit these parameters directly.

fallback_transport

Specifies the optional transport agent to use for recipients that are not found in the Linux **passwd** database. The Messaging Server sets this parameter to the Cyrus delivery agent, so that the local delivery agent first attempts to deliver mail to a Linux system account mailbox; if this fails, then it attempts to deliver mail via the Cyrus delivery agent to a Messaging Server mail account. This also means that if a Linux account user and Messaging Server mail account user are created with the same uid, then mail will always go to the Linux account user. See *mailbox_transport* parameter below for more information.

Warning

Do not change the *fallback_transport* parameter; doing so might disable the mail server, and mail may fail to be delivered to Messaging Server mail accounts.

local_recipient_maps

Specifies optional lookup tables that define all addresses for which the machine will accept mail with respect to the values of the *mydestination* and *inet_interfaces* parameters. If this parameter is defined, then the SMTP server will reject mail for any addresses not found in the databases specified in *local_recipient_maps*. The Messaging Server sets this parameter to *\$alias_maps*. To turn off this facility, comment out the *local_recipient_maps* parameter in the */etc/postfix/main.cf* configuration file.

mailbox_transport

This Postfix parameter specifies the optional transport in the *master.cf* file to use for local delivery after processing *aliases* and *.forward* files. Because this parameter has precedence over the *fallback_transport* parameter, it is not used by the Messaging Server and should not be set manually.

Warning

If you set this to the Cyrus delivery agent, mail will not be delivered to any Linux system accounts. If you set this to anything else, mail will fail to be delivered to Messaging Server mail accounts.

mydestination

Specifies what domains the machine will accept mail for and deliver locally, instead of forwarding to another machine. The **Server Manager** updates this parameter automatically when you create a new mail domain.

Note: We recommend that you not edit this parameter directly.

For more information about the `/etc/postfix/main.cf` file, see "Postfix Configuration - Basics" in the *Wietse's Postfix Project* documentation.

Relocating the Postfix Message Queue

By default, Postfix is installed with its message queue in the directory `/var/spool/postfix`. You can relocate the queue to a different filesystem, although we recommend that you do so before configuring the Messaging Server and enabling mail delivery.

To relocate the Postfix message queue before the Messaging Server is enabled:

1. Stop Postfix:

```
/etc/rc.d/init.d/postfix stop
```

2. Set the `queue_directory` parameter in `/etc/postfix/main.cf` to the new path for the queue and comment out the old path. For example:

```
# relocated Postfix message queue for Messaging Server use
# queue_directory = /var/spool/postfix
queue_directory = /new/location/postfix
```

3. Create the new directory for the Postfix message queue using the same directory name. For example:

```
mkdir /new/location/postfix
chown postfix:postfix /new/location/postfix
chmod 755 /new/location/postfix
```

4. Start Postfix:

```
/etc/rc.d/init.d/postfix start
```

Advanced Cyrus Configuration

This section discusses:

- Cyrus configuration parameters
- setting Cyrus mailbox quotas
- relocating the Cyrus message store

Cyrus Configuration Parameters

Cyrus configuration is controlled by parameters in the */etc/imapd.conf* file. Although there are around 100 parameters, they are set to reasonable defaults (by default or by Messaging Server installation) and do not require modification. The Messaging Server supports advanced Cyrus configuration, but note the constraints on the following parameters:

admins

Configures the list of user ids with administrative rights for Cyrus inboxes. For the Messaging Server this is configured to include the administrative user "*admin*". This user is necessary for proper operation of the Messaging Server Manager; *do not* delete "*admin*" from the the *admins* parameter.

sasl_pwcheck_method

Defines the mechanism used by the Cyrus IMAP and POP servers to verify plain text passwords. For the Messaging Server, this parameter is set to the value "*PAM*" to allow Cyrus servers to authenticate via PAM (Pluggable Authentication Modules), which in turn is configured for these servers to use LDAP authentication. *Do not change this parameter.*

For more information, see the *imapd.conf*(5) manual page.

Setting Cyrus Mailbox Quotas

You can set quotas on the size of Cyrus mailboxes using the **cyradm**(1) administrative client. This utility can be invoked as a script or interactively, and it can be used to administer local or remote Cyrus servers.

To use **cyradm** interactively, you must login as the *admin* user; the *LDAP* password is the same as the *admin* password. For example, to log into **cyradm**, enter:

```
cyradm -user admin hostname
```

After entering your *admin* password for **cyradm** and *LDAP*, you see the **cyradm** command prompt with your system name.

Quota manipulation commands operate on *quota roots*, which can refer to a single mailbox or group of mailboxes. For example, the user *susan* might have a quota root of *user.susan* that includes the mailboxes name *user.susan*, *user.susan.saved*, and *user.susan.todo*. Quota roots are created automatically when they are designated in the **cyradm setquota** command.

The following **cyradm** commands can be used to manipulate quotas:

lm

Lists mailboxes. *INBOX* is the admin account mailbox.

setquota

Sets or removes storage limits for the specified quota root.

listquota

Lists storage limits for root and mailboxes in the specified quota root.

listquotaroot

Lists storage limits for a given mailbox in the specified quota root.

help or **?**

Lists **cyradm** commands.

For more information, see "Quotas" in *Cyrus IMAP Server: Overview and Concepts* and the **cyradm**(1) manual page.

Relocating the Cyrus Message Store

By default, Cyrus is installed with its message store in the directory `/var/spool/imap`. You can relocate the queue to a different filesystem, although we recommend that you do so before configuring the Messaging Server and enabling mail delivery.

To relocate the Cyrus message queue before the Messaging Server is enabled:

1. Shut down the Cyrus master daemon to stop all IMAP/POP access:

```
/etc/rc.d/init.d/cyrus stop
```

2. Stop Postfix to halt all email delivery:

```
/etc/rc.d/init.d/postfix stop
```

3. Copy the existing message store to the new location. Using the **cp -p** flag will maintain the proper permissions and ownership of files and directories. For example:

```
mkdir -p /new/location
```

```
cp -pR /var/spool/imap /new/location/imap
```

4. If you are on an Open UNIX 8 system, go to the next step.

On an OpenLinux system, set the **S** attribute on the new message store hierarchy. When the **S** attribute is set on Linux ext2fs file systems, changes are written synchronously to the disk (this is equivalent to the **sync** mount option applied to a subset of the files). For example:

```
chattr -R +S /new/location/imap
```

5. Set the *partition-default* parameter in `/etc/imapd.conf` to the new path for the message store and comment out the old path. For example:

```
# relocated Cyrus message store for Messaging Server use
# partition-default: /var/spool/imap
partition-default: /new/location/imap
```


6. Start Cyrus:

```
/etc/rc.d/init.d/cyrus start
```

7. Start Postfix:

```
/etc/rc.d/init.d/postfix start
```

Note: The `/etc/pam.d/imap` and `/etc/pam.d/pop` files define the PAM modules that will perform authentication for IMAP and POP services, respectively. For the Messaging Server, these are set to use the LDAP PAM module and should not be altered.

