

# **SCO*office* Mail Server**

## **Getting Started Guide**

**The SCO Group**

# Getting Started Guide

by The SCO Group

The software described in this manual may only be used in accordance with the terms of its license agreement.

NO WARRANTY. This technical documentation is provided AS-IS. The SCO Group does not warrant that it is accurate, complete or error free. Any use of the technical documentation is at the risk of the user. The SCO Group reserves the right to make changes without prior notice.

Copyright© 2001-2003 Caldera International, Inc, d/b/a The SCO Group ("SCO")

All Rights Reserved.

No part of this document may be copied or translated to another language without the express written consent of The SCO Group.

SCO, the SCO logo, OpenLinux, and Webmin are trademarks or registered trademarks of Caldera International, Inc., d/b/a The SCO Group (pending shareholder approval) in the U.S.A. and other countries.

DRAC was written by J. Gary Mills and is copyright the University of Manitoba 1998.

Linux is a registered trademark of Linus Torvalds.

UNIX is a registered trademark of the Open Group in the U.S. and other countries.

UnixWare is a registered trademark of the Open Group and used under exclusive license.

All other trademarks are the property of their respective owners.

The SCO Group  
355 South 520 West, #100  
Lindon, Utah 84042-1911 USA  
[www.sco.com](http://www.sco.com)

Document version: 2.0  
3 January 2003

# Contents

Preface .....	v
About SCOoffice Mail Server Documentation .....	v
Viewing SCOoffice Mail Server Online Documentation .....	vii
Technical Support .....	viii
Register Your Product .....	ix
SCOoffice Mail Server Late News .....	ix
SCO Self-Help Services .....	ix
How Can We Improve This Book? .....	x
1. Introducing the SCOoffice Mail Server .....	1
Features .....	1
New Features in This Release .....	2
Architectural Overview .....	3
Licensing .....	4
2. Before Installing the SCOoffice Mail Server .....	7
Planning a SCOoffice Mail Server Configuration .....	7
Number of Mail and Calendar Clients .....	8
Mail Quotas .....	8
Junk Mail Filtering .....	9
Optional SCOoffice Mail Connector for Microsoft Outlook .....	11
Calendar Options .....	11
Local or Remote LDAP Server .....	13
Component File Locations .....	13
Local System User Accounts .....	13
High Availability Journalling Filesystem .....	14
System Requirements .....	16
UnixWare 7.1.2 (Open UNIX 8) Requirements .....	19
Installation Options .....	20
How the SCOoffice Mail Server Alters Your System .....	22
Using SSL Certificates .....	25
Installation and Configuration Overview .....	25
3. Installation and Removal .....	27
Native Linux Stand-alone Installation .....	28
Native Caldera OpenLinux Upgrade .....	30
UnixWare 7 Installation and Upgrade .....	31

Non-Graphical Installation and Upgrade .....	32
Removing the SCOoffice Mail Server .....	33
Setting the Language .....	34
DNS Setup .....	35
Known Limitations in This Release .....	36
4. Administering the SCOoffice Mail Server .....	39
The admin Administrative Account .....	40
The Server Manager Administration Interface .....	40
Managing Domains .....	42
Managing Mail Users .....	42
Managing Mail Aliases .....	45
Managing System Services .....	47
Advanced SCOoffice Mail Server Administration .....	49
5. Administering Mail Client Users .....	51
The Client Preferences Manager Interface .....	51
Configuring Mail Clients .....	53
Managing Mail Client Users .....	55
6. Calendar Configuration .....	57
Outlook Free/Busy Calendaring .....	57
About the Free/Busy Calendar ftp Server .....	57
Enabling Client Free/Busy Publication .....	59
SCOoffice Mail Connector for Microsoft Outlook .....	60

# Preface

This book introduces the *SCOoffice*<sup>TM</sup> Mail Server, a highly reliable, scalable messaging server that runs on SCO® Linux®, UnitedLinux, Caldera® OpenLinux®, SCO® UnixWare® 7 7.1.3, and SCO® UnixWare® 7 7.1.2 (formerly Open UNIX® 8) platforms. This book is intended primarily for *SCOoffice* Mail Server administrators, as well others who install and maintain *SCOoffice* Mail Server software.

## About *SCOoffice* Mail Server Documentation

This *Getting Started Guide* provides instructions and guidelines on basic installation and graphical administration procedures, intended to facilitate deployment of a standard *SCOoffice* Mail Server system. It describes:

- *SCOoffice* Mail Server features, architecture, and licensing.
- *SCOoffice* Mail Server planning and installation procedures.
- instructions how to manage mail server functionality.
- procedures for mail client user administration.

The *SCOoffice* Mail Server documentation set also includes:

*Administrator's Guide*

Complete presentation of graphical and command line interfaces, advanced configuration and administration

guidelines, and detailed background information. These are also available online when the product is installed, and in HTML and PDF formats on distribution media. Selected topics are also presented in Help screens from the **Server Manager** administrative interface.

### *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**. These are also available for administrators online 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)

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

### Component documentation

Documentation included with the principal open source components is accessible from the *SCOoffice* Mail Server index page:

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

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

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

The latest news about SCOoffice Mail Server features and product enhancements are provided in the regularly updated *Late News* document. It is available on the web and is free to all customers at:

<http://www.sco.com/support/docs/SCOoffice/mail>

## Viewing SCOoffice Mail Server Online Documentation

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

DocView is configured by default as a SCOoffice Mail 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 SCOoffice Mail Server system.

If you are running the SCOoffice Mail Server on a UnixWare 7 system (including Open UNIX 8), you should also consult the *Linux® Kernel Personality* documentation set, available using the help system on those platforms.

# Technical Support

The SCO*office* Mail 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 SCO*office* Mail 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, The SCO Group offers a wide variety of service options. For more information on SCO's service offerings, see the <http://www.sco.com/support> web page, contact your local SCO sales representative, or:

In the United States and Canada      Phone 1-800-726-8649.

In Latin American countries      See <http://www.la.sco.com/> for the nearest SCO 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* document

- familiarize yourself with SCO Self-Help Services

## **Register Your Product**

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

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

## **SCOoffice Mail Server Late News**

The latest news about SCOoffice Mail Server features and product enhancements are provided in the regularly updated *Late News* document. It is available on the web and free to all customers:

<http://www.sco.com/support/docs/SCOoffice/mail>

## **SCO Self-Help Services**

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

[http://www.sco.com/support/self\\_help.html](http://www.sco.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 SCO's Linux and Unix Knowledge Center
- FAQs - Customer identified Top Solutions
- Certified Hardware Listing for SCO's Products
- SCO 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@sco.com>.

Thank you.

# 1 Introducing the SCOoffice Mail Server

SCOoffice Mail Server is a secure, robust, and easy-to-use messaging server delivering superior application compatibility for small-to-medium sized businesses. Based on open standards for mail and directory services, the SCOoffice Mail Server supports Microsoft® Outlook products, messaging components of Netscape® and Internet Explorer browsers, and other popular mail clients. In addition, it interoperates with popular anti-virus, backup, and fax server software. The SCOoffice Mail Server is compatible with other SCO products and solutions; it supports SCO LinuxSCO Linux, Caldera OpenLinux Server and SCO UnixWareUnixWare 7 operating systems, and Reliant®HA clustering.

This chapter describes the SCOoffice Mail Server's:

- “Features”
- “Architectural Overview”

See also the *Late News* document for up-to-date information on SCOoffice Mail Server features and compatible third-party solutions:

<http://www.sco.com/support/docs/SCOoffice/mail>

## Features

SCOoffice Mail Server features include:

- Pre-tuned support for up to 2500 simultaneous users on standard hardware.
- Support for multiple and virtual domains.
- Integration with anti-spam, anti-virus, enterprise calendaring, and fax solutions.
- Support for Microsoft Outlook and other email and collaboration clients.
- One-button configuration for Outlook clients.
- Graphical installation with sufficient tools to completely set up and configure a fully functional mail server.
- Graphical and command line administrative utilities.

## **New Features in This Release**

The 2.0 release contains these new features:

- Support for SCO Linux and UnitedLinux.
  - Integrated with SCO Linux and UnitedLinux services.
  - Updated documentation for SCO Linux and UnitedLinux installation.
  - IMP 3.1 webmail client for SCO Linux and UnitedLinux
    - New easy-to-use address book.
    - Server-side filter rules.
    - Improved interface.
- Support for UnixWare 7.1.3 with Linux Kernel Personality.
- *SCOoffice* Mail Connector for Microsoft Outlook (licenses sold separately)

- Adds support for SSL.
- French, German, Italian, Polish, and Spanish support.
- License Manager
  - Per-user mailbox licensing enforced.
  - License Manager integrated into web-based Management Console.
- New IMAP server (based on Cyrus 2.1.10)
  - Single instance message store for improved scalability.
  - Support for Outlook namespace (no more having to keep server messages under INBOX).
  - Improved internationalization support.
  - Tuned for 5,000 simultaneous users.
- New language support for Italian and Polish in addition to French, German, and Spanish.

## Architectural Overview

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

- ease of use
- ease of management
- stability

- security
- ability to integrate with popular email clients
- superior performance in all these areas than provided by competing solutions for small and medium businesses

The principle components of the *SCOoffice* Mail Server are:

- Postfix Mail Transport Agent (MTA)
- Cyrus message store system
- Cyrus POP and IMAP servers
- LDAP directory based authentication and administration using OpenLDAP

The *SCOoffice* Mail Server also provides support for these protocols and standards:

- LDAPv3 directory server and support (included with Caldera OpenLinux).
- LDAP schemas in order to support the Outlook address book feature, alias management, and user authentication for POP and IMAP.
- Support for IMAP, POP, and SMTP standard protocols.
- SSL support for LDAP, SMTP, POP, IMAP, and HTTP.
- A **Webmin**<sup>™</sup> management interface for SSL certificate configuration.

For more information about *SCOoffice* Mail Server architecture, see Chapter 1 “About the *SCOoffice* Mail Server” in the *Administrator's Guide*.

## Licensing

The *SCOoffice* Mail Server provides user (client) licenses for a given number of mailboxes allowed on the system. The basic configuration includes user licenses for 25

mailboxes, sufficient for standard configuration and small-scale mail service. Consult your software vendor to purchase incremental user license bundles ("bump packs") as needed.

When the number of *SCOoffice* Mail Server mailboxes exceeds that for which the product has been licensed, the administrator must purchase additional licenses. The system will allow user access even when the user limit has been exceeded.

The *SCOoffice* Mail Server can be installed and licensed on SCO Linux, Caldera OpenLinux, and UnixWare 7 with Linux Kernel Personality platforms.



# 2 Before Installing the SCOoffice Mail Server

This chapter presents important information you need to consider before installing the SCOoffice Mail Server:

- “Planning a SCOoffice Mail Server Configuration”
- “System Requirements”
- “Installation Options”
- “How the SCOoffice Mail Server Alters Your System”
- “Installation and Configuration Overview”

## Planning a SCOoffice Mail Server Configuration

We recommend that you consider the following factors before installing the SCOoffice Mail Server. Doing so will allow you to administer the SCOoffice Mail Server more efficiently and better accommodate the changing needs of your system:

- number of mail clients
- mail quotas

- junk mail filtering
- *SCOoffice* Mail Connector for Microsoft Outlook
- calendar options
- local or remote LDAP server
- component file locations
- local system user accounts
- high-availability journalling filesystem

**Note:** We recommend installing the *SCOoffice* Mail Server on a clean, freshly-installed system that is dedicated for mail server use.

## Number of Mail and Calendar Clients

Estimate the number of mail clients your system must service for a reasonable period of time into the future. This will help you determining licensing and system hardware needs. Based on these decisions, you might also want to set mail quotas for client users.

## Mail Quotas

The *SCOoffice* Mail Server allows you to set quota limits on the size of users' mailstores, which include their inboxes and folders. Default quotas can be assigned such that each new user's account is created with the same quota; to do so, set the **DefaultQuotaLimit** ACL (Access Control List) attribute as described in the `msgaclset(8)` manual page. Individual user mail quotas can be managed with the **Server Manager** as described in “Managing Mail Users”. Because there are no global controls for mail quotas, we recommend that you set quota policy before creating *SCOoffice* Mail Server users.

# Junk Mail Filtering

The SCOffice Mail Server provides protection against *junk mail* (unsolicited email or *spam*). Because filtering can be implemented globally or per user, we recommend that you set junk mail policies before creating mail client users.

The following mail filters can be controlled from administrative interfaces:

## built-in junk mail filter

This simple filter diverts any mail not directly addressed to a SCOffice Mail Server user or alias. Diverted mail can be sent to a folder or destroyed. This eliminates messages without a To: or CC: line; doing so prevents the delivery of Blind CC (bcc) messages, a major vehicle for unsolicited email. This filter is intended to be managed by individual users; when global access permissions are granted, users can turn the filter on and off, and can modify the behavior of the filter with exception lists. This filter acts when mail is delivered to individual mailboxes.

There are two levels of administrative control for this filter:

- At the command line, a default value can be set using the `msgaclset(8) --spamfilterenabled` option, which turns it on or off at user creation. That is, if the default is set on, all users have filtering enabled when their accounts are created. Initial default settings can be modified using the `msgaclset(8)` utility; these settings cannot be managed globally.
- In the **Server Manager**, users can be globally granted or denied permission to change their own junk mail settings. If granted, client users can use the **Preferences Manager** to turn filtering on or off and manage exception lists, as described in Chapter 5 “Avoiding Junk Mail”. The administrator can also manage indi-

vidual client junk mail preferences manually with the **msgusermod(8)** utility.

## Realtime Blackhole List (RBL(SM))

This subscription service provided by Mail Abuse Prevention System LLC (MAPS(SM)) creates intentional network outages (*blackholes*) for the purpose of limiting the transport of known unsolicited mass email. RBL filtering takes place as mail is received by the SCOoffice Mail Server.

RBL access can be controlled in the **Server Manager** (in the System menu under Junk Mail) although you must subscribe to the service before mail is filtered. For more information, see the MAPS RBL website:

<http://mail-abuse.org/rbl/>

You can also configure Postfix manually to use RBL. For more information, see "Postfix Configuration - UCE Controls" in the *Wietse's Postfix Project* documentation.

**Warning:** RBL provides comprehensive and strict protection that is not appropriate for all mail systems. After initial RBL configuration, it is very likely that some legitimate messages will not be delivered to your SCOoffice Mail Server system until it is fully configured. You should familiarize yourself thoroughly with the RBL service before implementing it.

RBL and the BCC filter can be used together, because they are applied at different points in the mail delivery cycle. However, RBL is applied first and it is the stricter filter. Therefore, individual user's exception lists could only remove messages already filtered by RBL, not admit messages already excluded by RBL.

Many modern mail clients include their own junk mail filtering. These can also be used in conjunction with RBL and BCC filters, although mail client filtering takes place last in the mail delivery cycle and therefore exerts least control in a multi-filter environment.

You will probably want to use one of the following combinations of BCC filtering defaults and mail client user access permissions:

<b>BCC filter default</b>	<b>user access</b>	<b>filter behavior</b>
on	on	Filter on for all users, individual users can turn it on/off and control exception lists.
off	on	Filter off for all users, individual users can turn it on/off and control exception lists.
off	off	Filter off for all users, individual users cannot control filter; mail filtering must be handled by RBL or mail client software.

## **Optional SCOoffice Mail Connector for Microsoft Outlook**

SCOoffice Mail Connector for Microsoft Outlook provides access to advanced features of Microsoft Outlook. SCOoffice™ Mail Connector provides complete mapping and synchronization of the user's mail and special folders to the Cyrus IMAP server using the IMAP protocol. MAPI is not used. This feature enables the sharing of the special folders such as calendar, contacts, journal, notes, and tasks. The sharing of the special folders marks the introduction of meaningful collaboration with Outlook on an IMAP based messaging platform. The collaborative features of Outlook that were once available only with Exchange are now available to SCOoffice Mail Server.

SCOoffice Mail Connector for Microsoft Outlook is a separately licensed product provided on a separate CD with the SCOoffice Mail Server product. See the documentation on that CD for more information.

## **Calendar Options**

The SCOoffice Mail Server provides two calendar solutions:

Outlook "free/busy" calendar support

The *SCOoffice* Mail Server includes default 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.

*SCOoffice* Mail Connector for Microsoft Outlook

The calendar and other special folders in Microsoft Outlook can be shared using the optional *SCOoffice* Mail Connector for Microsoft Outlook. This feature permits users to access and update shared calendars. See “Optional *SCOoffice* Mail Connector for Microsoft Outlook” for more information.

When mail client users configure their Outlook software for the *SCOoffice* Mail Server using the **Outlook Configuration Tool**, calendar configuration information is downloaded automatically, including:

- free/busy configuration.

Before installing and deploying a calendaring solution, we recommend that you consider these points:

- Identify which client users are appropriate for the available solutions:
  - Outlook Free/Busy; Outlook only.
  - *SCOoffice* Mail Connector for Microsoft Outlook; Outlook only.
- If you are deploying a new *SCOoffice* Mail Server installation, note that Outlook 2000 and Outlook 98 clients must be configured in Internet Email Only mode for Outlook free/busy calendaring, and in Corporate/Workgroup mode to use in the *SCOoffice* Mail Connector for Microsoft Outlook.

**Note:** Outlook 2002 (XP) clients automatically detect mode requirements, and do not have to be reconfigured.

- If you require multiple calendar nodes, we recommend that you estimate the number of calendar users, group them logically, and create the nodes *before* creating SCOoffice Mail Server users. Otherwise, user accounts must be updated manually with calendar information.

For more information on SCOoffice Mail Server calendar solutions, see Chapter 6 “Calendar Configuration”.

## Local or Remote LDAP Server

Determine whether the LDAP server component of the SCOoffice Mail Server will be located on the same host system as other SCOoffice Mail Server components or on a different system. LDAP is the only SCOoffice Mail Server component that can be located on a remote system. See “Configuring a Remote OpenLDAP Server” in the *Administrator's Guide* for more information.

**Note:** This is an advanced configuration procedure that requires extensive LDAP knowledge and experience.

## Component File Locations

SCOoffice Mail Server components are installed in default locations. They can be moved, but doing so after the SCOoffice Mail Server is serving mail will cause a disruption in mail services. See Chapter 6 “Managing SCOoffice Mail Server Components” in the *Administrator's Guide* for more information.

## Local System User Accounts

When you install the system that will host the SCOoffice Mail Server, you have the opportunity to create system user accounts, each of which has a user ID and associated login name. The SCOoffice Mail Server also uses its own mail User ID for IMAP authentication and other purposes.

During installation of the system on which you will run the *SCOoffice* Mail Server, we recommend that you not create accounts for any user for whom you intend a *SCOoffice* Mail Server account.

You can create system users with the same IDs as those used by the *SCOoffice* Mail Server. By default, email sent to the address `username@hostname.domain.com` will be delivered on the system to the file `/var/mail/username`. Email sent to `user@domain.com` will be sent to the *SCOoffice* Mail Server mail store. Note that the User ID is distinct from the first element of the email address and that they can be different from each other.

## High Availability Journalling Filesystem

Filesystem journalling protects against data loss when a system unexpectedly loses power without the appropriate shutdown procedure. The EXT3 journalling filesystem is supplied as an optional filesystem with Caldera OpenLinux Server 3.1.1. The default filesystem on SCO Linux and UnitedLinux is the Reiser filesystem, which is also a journalling filesystem. The EXT3 journaling filesystem is optional on SCO Linux and UnitedLinux.

In a *SCOoffice* Mail Server environment, filesystem journalling affords the greatest protection to the Postfix queue directory (`/var/spool/postfix`), which contains email content. In addition, because most files do not remain long in the volatile mail queue, they are usually written only to the journal and deleted from there, with negligible performance overhead.

To take full advantage of journalling filesystem high availability, you will probably want the Postfix queue directory on a separate partition. If so, you must configure this partition before installing the *SCOoffice* Mail Server.

To implement filesystem journalling on a *SCOoffice* Mail Server system, we recommend that you:

- Use `data=journal` journalling mode for the `$queue_directory` (usually `/var/spool/postfix`)

- Mount the *\$queue\_directory* using the **noatime** option. Postfix disregards inode access times, so there is a small performance gain by setting this option.
- Use the **chattr**(1) command to set the filesystem for synchronous updates:

```
chattr -R -S /var/spool/postfix
```

- Do not use `data=journal` journalling mode for the `/var/log` directory. The default mode affords the same protections for appended files, and it is faster. This usually means separate partitions for `/var/log` and `/var/spool/postfix`.
- Disable the write-cache for your drive:

```
hdparm -W0 /dev/hda
```

- Use the **elvtune**(8) utility to tune disk performance and interactiveness:

```
elvtune -r 4096 -w 8192
```

On soft-RAID devices, you need to use **elvtune** on each physical drive.

For example, after following these guidelines the **mount**(8) command would show a configuration similar to the following:

```
/dev/hda3 on / type auto (rw,errors=remount-ro)
/dev/hda1 on /boot type ext3 (rw)
/dev/hda6 on /var/spool type ext3 (rw,data=journal,noatime)
/dev/hda7 on /var/log type ext3 (rw)
```

For more information about onfiguring journalling filesystems with Postfix, see:

<http://www.stahl.bau.tu-bs.de/~hildeb/postfix/ext3.shtml>

# System Requirements

Platform:	Any of the following: <ul style="list-style-type: none"><li>- SCO Linux</li><li>- UnitedLinux</li><li>- Caldera OpenLinux Server 3.1</li><li>- Caldera OpenLinux Server 3.1.1</li><li>- UnixWare 7 with Linux Kernel Personality (including Open UNIX 8)</li></ul>
RAM:	minimum 64Mb system + 1Mb per user, 512Mb recommended (in addition to platform requirements)
Disk space:	minimum 40Mb system + appropriate mailbox allocation per user (in addition to platform requirements)
Networking:	TCP/IP networking with DNS name resolution configured
Installation profile:	OpenLinux or LKP: “Web Server” or “All Packages”  SCO Linux: “Default System for SCO Linux” or “Default System for UnitedLinux”
Language support:	English, French, German, Italian, Polish, and Spanish

**Note:** We recommend installing the *SCOoffice* Mail Server on a clean, freshly-installed system that is dedicated for mail server use.

Compatible software products (such as calendar and backup solutions) may have additional RAM and disk space requirements.

Your designated *SCOoffice* Mail Server system must also satisfy basic system requirements. In particular:

- Caldera OpenLinux 3.1 and greater includes the 2.4 kernel compiled to support up to 64GB of RAM. As a result, the kernel and Caldera OpenLinux (and hence the

SCOoffice Mail Server) will only function on systems that support the PAE (Physical Address Extensions) standard. Such CPUs include the following:

Intel Celeron  
Intel Pentium Pro  
Intel Pentium II  
Intel Pentium III  
Intel Pentium 4  
AMD Athlon  
AMD Duron  
AMD Thunderbird

- Although UnixWare 7 and SCO Linux run on the following CPUs, Caldera OpenLinux running under LKP does not run on them or on anything earlier:

Intel Pentium  
Intel Pentium MMX  
AMD K6 and K6 2

For more information, see:

- *UnixWare 7.1.2 (Open UNIX 8) Requirements*
- *Caldera OpenLinux 3.1 Installation Guide*
- *Getting Started Guide for UnixWare 7.*

*Do not* attempt to install the SCOoffice Mail Server on a system with a Microsoft Windows® operating system already installed. The installation will fail in unpredictable ways. The **autorun.inf** facility is included on the media distribution only for the purpose of displaying release documentation.

To ensure that RPM packages required by the SCOoffice Mail Server are already on your system, select the `webserver` installation profile (or `All Packages`). Other profiles do not contain the full set of RPM packages required by the SCOoffice Mail Server. This is required for both native and LKP installations. On SCO Linux, simply

accept the default package selection during installation. If you choose to alter the package selection, select one of the `Default System` configurations.

The following RPM packages are required by the *SCOoffice* Mail Server and should not be removed from your system:

apache  
apache-devel  
apache-doc  
libpam  
libpam-devel  
openldap  
openldap-devel  
openssl  
openssl-devel  
openssl-devel-static  
pam\_ldap  
perl-modules  
php  
php-doc

**Warning:** The *SCOoffice* Mail Server reconfigures these packages. Do not recompile or update them except as documented for product upgrades; doing so might disable the *SCOoffice* Mail Server.

We recommend that you use one of the following browsers for both administrative and client use:

- Internet Explorer Version 5 or greater
- Netscape Communicator 6 or greater

Netscape Communicator 4.7 can be used, although some features of the *SCOoffice* Mail Server graphical interfaces are not functional with this browser.

# UnixWare 7.1.2 (Open UNIX 8) Requirements

- Open UNIX 8 Supplement
- EELS Conflict with IMP Webmail Components on Open UNIX 8

## Open UNIX 8 Supplement

We recommend that you download and install the following supplement before installing the *SCOoffice* Mail Server on your Open UNIX 8 system:

ou800pk4: Open UNIX 8 Release 8.0.0 Maintenance Pack 4	Fixes several performance and security problems. You must install the Maintenance Pack after installing LKP to ensure that the LKP fixes in the Maintenance Pack are installed.
--	---

It is available from the:

SCO website	<a href="http://www.sco.com/support/ftplists/ou8list.html">http://www.sco.com/support/ftplists/ou8list.html</a>
-------------	---

SCO ftp site	Enter <b>ftp -p ftp.sco.com</b> and change directories ( <b>cd</b> ) to <code>pub/openunix8</code> .
--------------	--

**Note:** You must invoke **ftp** in passive mode (that is, with the **-p** option).

Before installation, familiarize yourself its cover letter. If you have already installed the *SCOoffice* Mail Server on your Open UNIX 8 system, the supplement can be safely installed to correct performance and logging problems after the *SCOoffice* Mail Server has been installed and configured.

After installing `ou800pk4`, use the following procedure to enable Linux **syslog** logging on your Open UNIX 8 system:

1. As `root`, edit the file `/unixware/etc/init.d/linuxrc` and remove all occurrences of the string `K99syslog` and `S01syslog`. This will enable Linux **syslog** to be started at boot time.

2. Run the **linux** command to enter the LKP environment, then enter:

```
cd /etc/rc.d/init.d
./syslog stop
./syslog start
```

By default, Postfix logging will now be saved in the file `/var/log/mail` and Cyrus logging in the file `/var/log/imap`.

## **EELS Conflict with IMP Webmail Components on Open UNIX 8**

The Enhanced Event Logging System (EELS) should not be installed on an Open UNIX 8 system with the *SCOoffice* Mail Server. EELS blocks port access for the mysql database, upon which the IMP webmail system depends. If you intend to implement IMP webmail on an Open UNIX 8 *SCOoffice* Mail Server, EELS must not be present on your system.

# **Installation Options**

The *SCOoffice* Mail Server installs on :

- SCO Linux and UnitedLinux natively
- Caldera OpenLinux natively
- Caldera OpenLinux under Linux Kernel Personality (LKP) for UnixWare 7 (including Open UNIX 8).

*SCOoffice* Mail Server operation and performance are equivalent on these platforms with comparable hardware and networking.

*SCOoffice* Mail Server Release 2.0 can also be installed:

on an existing *SCOoffice*  
Mail Server system

*SCOoffice* Mail Server Release 2.0 will detect your previously installed *SCOoffice* Mail Server release and upgrade it to the current version. It is not necessary to install or remove *SCOoffice* Mail Server maintenance packs before upgrading your system. For more information, see Chapter 3 “Installation and Removal”.

from the command line

*SCOoffice* Mail Server Release 2.0 can be installed in non-graphical mode from the command line using the **install.sh -c** option. For more information, see “Non-Graphical Installation and Upgrade”.

# How the SCOoffice Mail Server Alters Your System

The SCOoffice Mail Server adds the following RPM packages to your system:

Package	Description
msg	SCOoffice Mail Server framework
msg-doc	SCOoffice Mail Server documentation
cyrus-imapd	Cyrus IMAP server
cyrus-sasl	Cyrus SASL (Simple Authentication and Security Layer)
db3 (OpenLinux and UnixWare only)	Berkeley DB programmatic toolkit
db3-devel (openLinux and UnixWare only)	Berkeley DB header files, libraries, and documentation
drac	Dynamic Relay Authorization Control
gq	GQ graphical browser for LDAP
horde (SCO Linux only)	Horde PHP application framework
imp (SCO Linux only)	Internet Messaging Program web mail
perl-Convert-ASN	ASN.1 Encode/Decode library for perl
perl-IMAP-Admin	IMAP-Admin module for perl
perl-ldap	perl interface modules for LDAP servers
postfix (OpenLinux and UnixWare only)	Postfix Mail Transport Agent (MTA)

SCOoffice Mail Server components install by default on a single system. If you want to configure the SCOoffice Mail Server to use a remote LDAP server, see “Advanced OpenLDAP Configuration” in the *Administrator's Guide*.

**Warning:** The open source software packages listed here have been adapted for use on a *SCOoffice* Mail Server system. They should only be updated by *SCOoffice* Mail Server releases. Installing them from other sources, including non-*SCOoffice* Mail Server Linux distributions, might disable the *SCOoffice* Mail Server.

The *SCOoffice* Mail Server removes the following components from your system during installation:

- |           |   |
|-----------|---|
| sendmail™ | Including the sendmail, sendmail-cf, and sendmail-doc packages. Configuration parameters of this and other MTAs will conflict with those of the <i>SCOoffice</i> Mail Server Postfix MTA. In addition to sendmail, conflicts have also been noted with qmail. |
| imap™     | Including the imap and imap-devel packages. Configuration parameters of this and other IMAP or POP servers will conflict with those of the <i>SCOoffice</i> Mail Server Cyrus server.   |

**Warning:** Reinstalling any of these packages or installing new versions of them from other distributions will disable the *SCOoffice* Mail Server.

The *SCOoffice* Mail Server installation on UnixWare 7 sets the following kernel tunable parameters for the components specified:

- |         |   |
|---------|---|
| Apache  | <ul style="list-style-type: none"><li>• SHMMAX 655576064</li><li>• SHMSEG 15</li></ul>  |
| Postfix | <ul style="list-style-type: none"><li>• SDATLIM 0x7FFFFFFF</li><li>• HDATLIM 0x7FFFFFFF</li><li>• SFNOLIM 2048</li><li>• HFNOLIM 2048</li><li>• SVMMLIM 0x7FFFFFFF</li><li>• HVMMLIM 0x7FFFFFFF</li></ul> |

- SHMMNI 1000
- ARG\_MAX 1048576
- SFSZLIM 0x7FFFFFFF
- HFSZLIM 0x7FFFFFFF
- MAXULWP 65000
- SSTKLIM 0x3FFFFFFF
- HSTKLIM 0x3FFFFFFF
- MAXLINK 32767
- NBUF 128
- NHBUF 32
- MAXUP 5000
- NPROC 12500

## UNIX Domain Sockets

- In `/etc/conf/sdevice.d/ticots`:

```
ticots  Y  2048  0  0  0  0  \
        0  0  0  -1
```

**Note:** The installation log records this tuning activity as errors; these errors can be safely ignored.

Additional kernel tuning might be required on your UnixWare 7 system. For more information, see the *Getting Started Guide* in UnixWare 7 and the *SCOoffice Mail Server Late News*.

# Using SSL Certificates

The SCOoffice Mail Server provides SSL (Secure Socket Layer) configuration by default using demonstration keys. Existing demonstration keys are backed up during the Release 2.0 installation and upgrade.

We recommend that you acquire a signed certificate and key before bringing your SCOoffice Mail Server into production. For more information, see “Enabling SSL” in the *Administrator's Guide*.

# Installation and Configuration Overview

The basic steps to install and configure the SCOoffice Mail Server are:

1. Plan your SCOoffice Mail Server deployment and review the “System Requirements” discussed in this chapter.
2. Install the base platform using the web server profile as described in your platform documentation.
3. Install the SCOoffice Mail Server as described in Chapter 3 “Installation and Removal”.
4. If desired, install compatible software components.
5. Point your web browser at `https://hostname/msg` to access the **Server Manager** interface, as described in Chapter 4 “Administering the SCOoffice Mail Server”.
6. Log in to the **Server Manager** as `admin` with the password `admin` and change the password for this administrative account, as described in Chapter 4 “Administering the SCOoffice Mail Server”.
7. If desired, use the `msgaclset(8)` utility to set default mail quotas and junk mail filtering before adding user accounts.

8. If compatible software products are installed, configure them as desired before adding user accounts.
9. Use the **Server Manager** to configure and administer your *SCOoffice* Mail Server mail system, adding user accounts, aliases, and domain arrangements as desired, as described in Chapter 4 “Administering the *SCOoffice* Mail Server”.
10. Configure users' mail client software by instructing them to connect to `https://hostname/msg` from their desktop computers using personal user accounts and passwords, as described in Chapter 5 “Administering Mail Client Users”.

Consult the remainder of this document and the *Administrator's Guide* for more detailed instructions.

# 3 Installation and Removal

The *SCOoffice* Mail Server provides a graphical installation with sufficient tools to completely set up and configure a fully functional mail server, as well as an in-place upgrade from earlier *SCOoffice* Mail Server releases. This chapter describes:

- “Native Linux Stand-alone Installation ”
- “Native Caldera OpenLinux Upgrade”
- “UnixWare 7 Installation and Upgrade”
- “Non-Graphical Installation and Upgrade”
- “Removing the SCOoffice Mail Server”
- “Setting the Language”
- “DNS Setup”
- “Known Limitations in This Release”

See also the *Late News* document for up-to-date information on installation issues and platform support:

<http://www.sco.com/support/docs/SCOoffice/mail>

# Native Linux Stand-alone Installation

Use the graphical Installer to install the *SCOoffice* Mail Server on a local SCO Linux, UnitedLinux, or Caldera OpenLinux system. The *SCOoffice* Mail Server Installer can be started from the **autorun.sh** or **install.sh** scripts on installation media.

To install on a local SCO Linux, UnitedLinux, or Caldera OpenLinux system:

1. Prepare the installation media. You must have *SCOoffice* Mail Server distribution media or a CD you created from downloaded ISO images.
2. Log on as `root`.
3. Insert the installation media in the drive.

If the Automount facility is enabled (this is the default), you will see the *SCOoffice* Mail Server Welcome screen, where you are prompted to run the installation. This will invoke **autorun.sh**. You can either:

- Click on Yes to begin the installation immediately.
- Click on No to defer installation. You can begin the installation at any time by clicking on the `install.sh` icon in the Konqueror file manager when it displays the contents of the distribution media.

If Automount has been disabled:

- a. Use the **mount(8)** command to mount the installation media:

```
mount /dev/cdrom /mount_point
```

- b. Run **install.sh** from the CD mount point:

```
/mount_point/install.sh
```

The graphical installation will start.

4. Review the licensing statement, and select Continue.
5. Enter the license information from your Certificate of License and Authentication. You may only have a Serial Number and Activation Key, not necessarily License Data.

If you don't yet have a license, you may skip entering the license at this step, in which case you will be using a 60-day evaluation license.

Select Continue.

6. If you did not enter license information, or entered incorrect license information, you are given an opportunity to select Back to go back to the licensing screen. Otherwise select Continue to go on.
7. Review the displayed confirmation statement. When you select Continue, installation will begin.
8. When the installation is complete, you are prompted to view the installation log files, with the option to save them. From the screen you can select to view the Log, Debug, or Error messages. Select Save to save any one of them.

The installation script will not start if RPM packages required by the *SCOoffice* Mail Server are not found on the system or if DNS is not configured. If this happens, install the packages, correct any errors listed, and start it again.

After displaying licensing information, **install.sh** analyzes the installed RPM list and installs any *SCOoffice* Mail Server RPMs that are not listed. If any of the RPMs failed to install, try to install them manually or check the installed packages database using the **rpm(1)** command.

The main log file displays the results of default component configuration conducted during the installation process, including:

- verbose output of the pre- and post-install scripts
- daemons started:

- **slapd** (LDAP daemon)
- Postfix **master(8)** daemon
- Cyrus **master** daemon (**imap\_master(8)** )
- **httpd** instances for Apache and DocView
- default configuration values

Installation errors are reported in the Errors log file.

**Note:** Many of the error notices at the beginning of the log file are normal and expected. If your installation fails, check the end of the Errors log file.

**Caution:** As soon as installation is complete, we recommend that you change the initial `admin` password, which has been set by default to "admin"; see "The admin Administrative Account".

This completes *SCOoffice* Mail Server installation. You can now configure mail service as described in Chapter 4 "Administering the SCOoffice Mail Server".

## Native Caldera OpenLinux Upgrade

You can upgrade the *SCOoffice* Mail Server to Release 2.0 using the **install.sh** utility. Upgrades are supported from:

- *SCOoffice* Mail Server Release 1.0
- *SCOoffice* Mail Server Release 1.0 with Maintenance Pack 1
- *SCOoffice* Mail Server Release 1.0 with Maintenance Pack 2
- *SCOoffice* Mail Server Release 1.1
- *SCOoffice* Mail Server Release 1.1.1

It is not necessary to add or remove *SCOoffice* Mail Server maintenance packs before performing an upgrade.

**Note:** The Release 2.0 upgrade cannot be removed. That is, once the upgrade has been performed, you cannot roll back to an earlier release. If you want to return to an earlier release, you must back up your data, remove the *SCOoffice* Mail Server and reinstall with any desired maintenance packs.

To upgrade a local Caldera OpenLinux system, follow the procedure described in “Native Linux Stand-alone Installation”. The installation process will detect the previous version and upgrade it appropriately.

## UnixWare 7 Installation and Upgrade

You can also install or upgrade the *SCOoffice* Mail Server on a UnixWare 7 system (including Open UNIX 8) with LKP using the same **install.sh** script. However, before doing so, you must follow these steps as `root` on the UnixWare 7 system:

1. Prepare the installation media. You must have *SCOoffice* Mail Server distribution media or a CD you created from downloaded ISO images.
2. Log in as `root`. If you are installing the *SCOoffice* Mail Server for the first time, start a terminal window from your graphical environment. The X server must be running for the *SCOoffice* Mail Server installation, but it is not required for the *SCOoffice* Mail Server upgrade.
3. Mount the *SCOoffice* Mail Server CD-ROM on `/linux/mnt/cdrom` by entering:

```
mount `devattr cdrom1 bdevice` /linux/mnt
```

Be sure to use left quotes in the command.

4. Ensure that the X display is available (but only to local system users) by entering:

```
xhost local:
```

5. Run the **linux** command to enter the LKP environment.

6. In the LKP environment, you can then change directories (**cd**) to `/mnt/cdrom` and do:

```
cd /mnt/cdrom
./install.sh
```

**Note:** The **autorun.sh** script does not run under LKP.

The graphical installation will start.

7. Follow the rest of the steps described in “Native Linux Stand-alone Installation”. The installation process will automatically detect any previous versions and perform the appropriate upgrade. If no previous version is detected, and fresh install is performed.
8. When the installation or upgrade is complete, reboot your UnixWare 7 system by either:
  - clicking the reboot button after the graphical installation completes, or
  - exiting the Linux Kernel Personality environment and running the **shutdown** command from the UnixWare 7 environment.

**Caution:** If this is your first SCO*office* Mail Server installation, we recommend that you immediately change the initial `admin` password, set by default to "admin"; see “The admin Administrative Account”.

The mailbox for the `admin` administrator account might not be created automatically during installation on UnixWare 7. If not, it must be created manually or the `admin` user will not be able to send or receive mail. For more information, see “Known Limitations in This Release”.

## Non-Graphical Installation and Upgrade

The SCO*office* Mail Server can be installed or upgraded without the graphical Installer using the **install.sh** utility with the **-c** option. This performs a non-interactive install

that does not rely on the X server; the installation proceeds directly with no prompts or checks. This can be useful if you have an archive file of the *SCOoffice* Mail Server media that you would like to install on a remote system.

To install or upgrade the *SCOoffice* Mail Server in non-graphical mode, unpack the archive file and run the following command in the same directory:

```
./install.sh -c
```

When the installation or upgrade is complete, we recommend that you review the `/root/install.log` file to confirm that the installation was successful.

## Removing the *SCOoffice* Mail Server

To remove the *SCOoffice* Mail Server from your system, enter:

```
cd /
```

```
/opt/lsb-sco.com/msg/bin/msguninstall
```

The removal script does not:

- downgrade to an earlier *SCOoffice* Mail Server version; it removes the entire product.
- reinstall components that were removed at *SCOoffice* Mail Server installation; for example, `sendmail™` and `imap™`.
- restore updated RPMs to the earlier version.
- remove configuration directories that you populated or that contain files backed up by the *SCOoffice* Mail Server. The removal script error listing identifies these directories.
- remove configuration information from mail clients.

**Note:** If the removal script fails for any reason, the removal might not be complete and the `msguninstall` utility might no longer be available. In this case, you must run the

**uninstall.sh** script from the distribution media. To do so, ensure that the *SCOoffice* Mail Server CD-ROM is mounted and enter:

```
/mount_point/uninstall.sh
```

For more information, see the `msguninstall(8)` manual page.

**Note:** After removing the *SCOoffice* Mail Server from an Open UNIX 8 system and re-installing it after reconfiguring the system for a security level higher than the normal security setting, the `/home/vscan` directory is owned an incorrect system user ID. This prevents the *SCOoffice* Mail Server from sending mail. This is because the `/home/vscan` directory is not removed by the **msguninstall(8)** utility, and under higher than normal security settings, user IDs are not recycled. Thus when the `vscan` user is assigned a different user ID after reinstallation, the directory is owned by the wrong user ID.

To work around this problem, do one of the following:

- Remove the `/home/vscan` directory after removing the *SCOoffice* Mail Server.
- Run the following command after reinstalling the *SCOoffice* Mail Server:

```
chown vscan /home/vscan
```

## Setting the Language

*SCOoffice* Mail Server graphical interfaces provide language support for:

- English
- French
- German
- Italian
- Polish
- Spanish

To access the **Server Manager** in one of these languages, simply set the language in your browser. You should also instruct mail client users to set the appropriate language for their browser; translated Help screens for the **Preferences Manager** are provided.

**Note:** The SCOoffice Mail Server default character set is UTF-8.

Netscape Communicator 4.7 does not support automatic switching of character sets. To display SCOoffice Mail Server graphical interfaces correctly, UTF-8 must be set specifically in the View->Character Set menu.

## DNS Setup

If you install the SCOoffice Mail Server on a system that is not connected to the Internet -- for example, a stand-alone system with intermittent Internet connections -- additional DNS (Domain Name Service) configuration might be necessary if outgoing mail is not delivered. You can confirm this problem by running the **mailq** command; if errors indicate that it was not able to contact host 127.0.0.1 for queued messages, use the following procedure to modify your DNS configuration:

1. Verify that:
  - the output of the `nslookup 127.0.0.1` command is `localhost.domain_name`.
  - the output of the `nslookup localhost.domain_name` command is `127.0.0.1` with server name `localhost.domain_name`.
  - there is no MX record for `localhost`. There is no such record by default, but if there is, Postfix can generate looping errors.

If these conditions are not met, you must modify your name service configuration accordingly.

2. Edit the `/etc/postfix/main.cf` file and change it so that the `content_filter` assignment line reads:

```
content_filter = smtp:localhost.$mydomain:10025
```

# Known Limitations in This Release

Note the following known limitations in this *SCOoffice* Mail Server release:

No mailbox for `admin` account on UnixWare 7

In a normal installation, a Cyrus mailbox is created automatically for the `admin` user. However, installation errors on an UnixWare 7 system might prevent this mailbox from being created; these errors do not appear in the installation log. You must verify that the mailbox exists and create it manually if it does not. Otherwise, the `admin` user will not be able to send or receive mail. To do so:

1. Log onto the UnixWare 7 system as `root` and switch to the LKP environment by entering:

```
linux
```

2. Verify the existence of the `admin` mailbox by entering:

```
ls -d /var/spool/imap/user/admin
```

If this directory is present, you have an `admin` mailbox on your system; you do not need to create the mailbox manually.

If you receive a `No such file or directory` error, the `admin` mailbox was not created. You must do so manually as described in the next step.

3. Use the **`msginboxcreate`** utility to create the `admin` mailbox:

```
/opt/lsb-sco.com/msg/bin/msginboxcreate \  
--name=admin
```

You will be prompted for the `admin` password.

**Note:** The `msgusercreate(8)` manual page cautions against running this utility from the command line. That is because a user's `UserID` and mailbox are usually created at the same time using either the **Server Manager** or the `msgusercreate(8)` utility. However, due to an installation error, the `admin UserID` has been created without a corresponding mailbox, so **msginboxcreate** can be run safely from the command line in this case only.

4. Verify the existence of the `admin` mailbox as described in Step 2.

You can now access your `admin` account mailbox.

#### Deleting users and aliases

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 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.

#### Port number cannot be set with **msgldaphost**

If you use the **msgldaphost** utility to configure an alternate LDAP server, do not specify the `--port` option; doing so will cause LDAP authentication failures. The utility automatically sets the default port. For more information, see the `msgldaphost(8)` manual page.

#### Using the IMAP **ipurge** Utility with the *SCOoffice* Mail Server

The **ipurge(8)** utility deletes mail from IMAP mailbox or partition based on age or size. However, it has an undocumented `-f` option, which you must use if you wish to use the utility on *SCOoffice* Mail Server user mailboxes. By default, **ipurge** works only on public folders.

SCOoffice Mail Server  
Release 2.0 on Caldera  
OpenLinux Server 3.1 not  
fully localized

Because Caldera OpenLinux Server 3.1 is not internationalized or localized, not all localization features of SCOoffice Mail Server are available when it is installed on the Caldera OpenLinux 3.1 platform. If you require localized SCOoffice Mail Server support, we recommend that you upgrade Caldera OpenLinux to release 3.1.1.

SCOoffice Mail Server  
Release 2.0 localized docu-  
mentation and help screens

The SCOoffice Mail Server Release 2.0 *Client User's Guide* is available in English, French, German, Italian, Polish, and Spanish; this also ensures that Help screens for the **Preferences Manager** user interface are also available in these languages. However, the SCOoffice Mail Server *Administrator's Guide* guide has not been translated for this release, hence Help screens for the **Server Manager** interface are available in English only. This *Getting Started Guide* is also available in English only.

This list includes all product limitations known at the time of publication. Unless otherwise noted, they will be corrected in product updates or future releases. For more information, we recommend that you consult the SCOoffice Mail Server *Late News* document, which is updated regularly on the SCO website:

<http://www.sco.com/support/docs/SCOoffice/mail>

# 4 Administering the SCOoffice Mail Server

The SCOoffice Mail Server provides simple graphical administration using the **Server Manager**. This chapter describes:

- “The admin Administrative Account”
- “The Server Manager Administration Interface”
- “Managing Domains”
- “Managing Mail Users”
- “Managing Mail Aliases”
- “Managing System Services”
- “Advanced SCOoffice Mail Server Administration”

**Note:** We strongly recommend that you implement a backup procedure for your SCOoffice Mail Server immediately.

For more information, see Chapter 2 “Configuration and Administration” and Chapter 3 “Mail Administration” in the *Administrator's Guide*.

# The admin Administrative Account

The *SCOoffice* Mail 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.

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**.

Before proceeding with *SCOoffice* Mail Server configuration, we recommend that you change the initial `admin` password, set by default to "admin." Neither the `admin` password nor any user password can be a null string. You must enter a string of at least one character; we recommend that you follow conventional password precautions as described in Chapter 8 “Changing Your *SCOoffice* Mail Server Password”.

**Caution:** You must select and maintain passwords carefully to ensure the security of your *SCOoffice* Mail Server. Insufficient password protection is a security risk.

In addition to the `admin` account, the *SCOoffice* Mail Server provides a default `postmaster` mail alias. Postfix (as well as most other MTAs) require that an account for "postmaster" exists so that messages to the address "`postmaster@host.domain`" can be delivered successfully. It also 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. A `postmaster` alias is also created automatically in new domains. This alias should not be deleted from the domain.

## The Server Manager Administration Interface

The **Server Manager** is the principle *SCOoffice* Mail Server administrative utility. It is a web-based management interface with support for all functions required to administer an office mail server, including the ability to:

- Add/delete/modify virtual hosts, mail domains, mail users, and mail aliases.
- Monitor mail services.
- Control client user privileges (ACLs, Access Control Lists).

The **Server Manager** provides mail server administration screens accessible only by an administrator account with the login name "admin". By default, the **Server Manager** is served by the Apache webserver at:

```
https://hostname/msg
```

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

**Note:** SSL (Secure Socket Layer) connections are enabled by default in the *SCOoffice* Mail Server, allowing you to log in to the **Server Manager** immediately using an `https` URL. We strongly recommend that you use secure SSL connections provided by the `https` URL whenever possible.

The **Server Manager** screen includes menus for managing:

- Domains
- Users
- Aliases
- Services

It also includes:

- a Domain selection box.
- a general HELP link that connects to the DocView online help system.
- screen specific Help screens that connect to individual topics in the *Administrator's Guide*.

- a LOGOUT button.

**Note:** To protect SCOoffice Mail Server security, we recommend that you log out of the **Server Manager**, rather than simply closing the browser window, whenever you are not actively using the **Server Manager**.

## Managing Domains

To administer domains with the **Server Manager**, click on these buttons in the Domains menu:

View Domains	List the mail domains controlled by the SCOoffice Mail Server.
Create Domain	Enter a mail domain name and description.
Delete Domain	Delete the domain names you select.

To change domain names, including the primary domain, use the **msgdomainmove(8)** utility. For more information, see the **msgdomainmove(8)** manual page.

The SCOoffice Mail 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.

For information about managing *virtual domains* (multiple mail domains presented by the same mail server), see “Managing Mail Domains” in the *Administrator's Guide*.

## Managing Mail Users

You can use the **Server Manager** to create and modify mail accounts for users who receive mail on the SCOoffice Mail Server. In the Users menu, click on:

Create User	Creates a new user. Required entries are marked with an asterisk (*):
-------------	---

- \*User ID; an identification name for the user which is unique for all domains in your entire *SCOoffice* Mail Server installation.
- First Name
- Last Name
- \*Mail address
- \*Password
- Calendar Node (if *SCOoffice* Mail Connector for Microsoft Outlook is installed)

The following optional information can also be entered by the `admin` user when the account is created or updated later by the client user (on some browsers, these options are displayed when you click on More):

- Work Phone
- Mobile Phone
- Home Phone
- Pager
- FAX
- Title
- Office Location
- Alternate Mail (Only the `admin` user can modify this field, client users cannot do so.)
- Forward Mail To:

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

## View Users

Lists 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 user's Password.
- view and modify the user's mail Quota
- view Aliases to which the user is subscribed.
- Delete this user.

Clicking on Quota lists mail quota usage for all users, sorted by *email address*. Click on *email address* to set or modify the quota.

To set or modify the user's mail quota limit, click on View Users and

- select a *User ID* and click on Quota, or
- select the Quota view and click on an *email address*.

Quota limits apply to the user's entire mailstore, including inbox and folders. Enter a value in megabytes of disk space; enter NONE to remove the quota. For more information, see “Setting Mail Quotas” in the *Administrator's Guide*.

Find User	Searches for a user in the selected mail domain. You can enter a full or partial word to be found in the <i>User ID</i> or any of the <i>Name</i> fields. Click on the <i>User ID</i> links in the search results to display user information and take User Actions.
Delete User	Selects a <i>User ID</i> 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.

## Managing Mail Aliases

You can use the **Server Manager** to create and modify mail aliases. In the Aliases menu, click on:

Create Alias	<p>Creates a new alias in the current domain. Required entries are marked with an asterisk (*):</p> <ul style="list-style-type: none"> <li>• *Alias (the alias name)</li> <li>• Description</li> <li>• *Owner (at least one owner is required, multiple owners are permitted and recommended)</li> <li>• Membership (whether users may add or remove members to or from the alias); the default is Open.</li> <li>• *Alias Members (at least one member is required)</li> </ul>
--------------	---

If users have permission to create aliases (see “Managing System Services” below), they can also view and manage these fields. However, only the `admin` user can enable the following alias features (on some browsers, these options are displayed when you click on More):

Append File	The path of a file on the system to which mail to this alias will be appended.
Pipe Program	A program through which to pipe a message sent to the alias.

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

**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 settings listed
- add or remove alias Members
- add or remove alias Owners
- specify Programs/Files for the alias
- Delete this alias

**Find Alias** Searches 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.

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

**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.

# Managing System Services

Use the selections in the **Server Manager** System menu to control general *SCOoffice* Mail Server system services:

## Admin Password

Enter and confirm the new `admin` password value, then click on Apply to complete the change.

## User Access

You can grant or deny these global access privileges for users in all mail domains controlled by the *SCOoffice* Mail Server:

- User Profile Privileges:
  - Users can change their own password
  - Users can change their own profile
  - Users can change their own mail forward address
  - Users can change their own vacation notice
  - Users can change their own junk mail settings
- User Alias Privileges:
  - Users can create mail aliases
  - Users can add aliases as members of an alias
  - Users can add remote members to aliases

The default for all these settings is Yes.

**Note:** When you change these settings, **Preferences Manager** screens for users currently logged in are not

changed dynamically. We recommend that you alert SCOoffice Mail Server users when global or individual changes are made to their privileges.

## Mail Services

The **Server Manager** allows you to view the status and perform certain actions on the SCOoffice Mail Server component servers:

- cyrus - IMAP/POP Server
- docview - OpenLinux Documentation Server
- ldap - OpenLDAP Directory Server
- postfix - Mail Transport Agent (MTA)

## Junk Mail

The **Server Manager** allows you to control access to the Realtime Blackhole List (RBL) mail filtering service. Click on:

Reject messages                      to enable RBL service

Don't use RBL                        to disable RBL service

Then click on Apply to complete the change.

**Note:** RBL is a subscription service that must be contracted before mail is filtered. For more information, see “Junk Mail Filtering”.

# Advanced SCOoffice Mail Server Administration

Most routine SCOoffice Mail Server administration can be performed using the **Server Manager** interface. Nonetheless, there are a number of advanced tasks that must be performed from the command line or other interfaces, as documented in the *Administrator's Guide*.

**Note:** In addition to the topics in this chapter, we recommend that you consult the SCOoffice Mail Server *Late News* document, which is updated regularly on the SCO website:

<http://www.sco.com/support/docs/SCOoffice/mail>

Command line administration	Many of the functions available from the <b>Server Manager</b> can be performed at the command line; for example, adding multiple users with the <code>msgusercreate(8)</code> command. See “Administrative Interfaces” in the <i>Administrator's Guide</i> .
Importing user data	You can import user data from other systems; for example, using the <code>msgusermigrate(8)</code> command to convert a UNIX system <code>/etc/password</code> file into an LDAP datastore. See “Importing User Data” in the <i>Administrator's Guide</i> .
SCOoffice Mail Server component administration	Although the SCOoffice Mail Server ships with reasonable default settings for its principle LDAP, Postfix, and Cyrus components, each can be customized. See the individual component documentation listed on the DocView SCOoffice Mail Server home page.  <b>Caution:</b> Certain default parameters of these components cannot be changed without disabling your SCOoffice Mail Server installation. See Chapter 6 “Managing SCOoffice Mail Server Components” in the <i>Administrator's Guide</i> for a list of these parameters.

Mailbox recovery	You can perform disaster recovery on user mailboxes with Cyrus utilities. See “Mail Directory Recovery ” in the <i>Administrator's Guide</i> .
Enabling anti-virus protection	The <i>SCOoffice</i> Mail Server provides simple integration with commercial anti-virus software, and it supports Postfix component configuration for mail filtering. See “Avoiding Viruses” in the <i>Administrator's Guide</i> .
Virtual domains	The <b>Server Manager</b> can be used to create virtual domains (multiple mail domains presented by the same mail server). See “Managing Mail Domains” in the <i>Administrator's Guide</i> .
SSL security administration	While the <i>SCOoffice</i> Mail Server provides SSL (Secure Socket Layer) configuration by default using demonstration keys, many SSL benefits are not available without a signed certificate and key. See “Enabling SSL” in the <i>Administrator's Guide</i> .

# 5 Administering Mail Client Users

Mail client software must be configured for the SCOoffice Mail Server before client users can take advantage of its features. This chapter describes:

- “The Client Preferences Manager Interface”
- “Configuring Mail Clients”
- “Managing Mail Client Users”

**Note:** Although client configuration and preferences management has been designed to be easy to use, mail administrators might want to explain SCOoffice Mail Server configuration and features to mail client users.

For more information, see Chapter 4 “Managing Clients” in the *Administrator's Guide* and the *Client User's Guide*.

## The Client Preferences Manager Interface

The SCOoffice Mail Server includes the **Preferences Manager**, a web-based user interface with access controlled by the administrator. It provides client mail preference screens accessible to all users with an active SCOoffice Mail Server mail account and an Internet browser. Like the **Server Manager** screens, it is served by the Apache webserver at:

`https://hostname/msg`

although logging in with a user mail account displays a different set of screens.

**Note:** SSL (Secure Socket Layer) connections are enabled by default in the SCOoffice Mail Server, allowing you to log in to the **Server Manager** immediately using an `https` URL. We strongly recommend that client users log in with secure SSL connections provided by the `https` URL whenever possible.

The **Preferences Manager** screen includes menus for:

- setting and modifying user Preferences:
  - Change passwords.
  - Configure aliases.
  - Configure vacation mail.
  - Configure mail forwarding.
  - View mail configuration information.
- viewing other system Users.
- viewing and managing Aliases.

It also includes:

- a general HELP link that connects to the *Client User's Guide*.
- screen specific Help screens that connect to individual topics in the *Client User's Guide*.
- a LOGOUT button.

# Configuring Mail Clients

The *SCOoffice* Mail Server has been tested with the following mail client software:

- Outlook 2000
- Outlook 98
- Outlook Express
- Outlook XP
- Netscape Messenger version 4.7 on Windows, UNIX, and Linux
- Netscape Messenger version 6.0 on Linux and Windows
- Eudora Mail
- KMail (version shipped with KDE2)
- IMP, a web-based IMAP mail client included with Caldera OpenLinux and configured by default.

In addition, any mail client that correctly implements POP and/or IMAP protocols should be able to retrieve messages from the *SCOoffice* Mail Server.

Mail client software must be configured to authenticate with and receive messages from the *SCOoffice* Mail Server. You must therefore enable mail client users to run client configuration tools (for Outlook family clients) or manually enter configuration information on their personal systems. To enable a mail client user to access their mail from a *SCOoffice* Mail Server server:

1. Create a *SCOoffice* Mail 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 configuration screens of the mail client software.

3. Provide this account information to the user so they can log into the **Preferences Manager** and configure their mail client software. To do so, they must click on the Client Setup in the Preferences menu. This displays configuration information used by their mail client software to communicate with the *SCOoffice* Mail Server.
4. If you are migrating existing mail users to a *SCOoffice* Mail Server installation, you might need to inform them of potential changes to the appearance and behavior of their mail client software.

Client configuration procedures differ for the supported clients:

#### Outlook clients

The *SCOoffice* Mail Server provides the **Outlook Configuration Tool**, which supports the configuration of *SCOoffice* Mail Server add-in functionality in these mail clients:

- Outlook XP
- Outlook 2000
- Outlook 98
- Outlook 97
- Outlook Express with Internet Explorer 5 or later

**Note:** If *SCOoffice* Mail Connector for Microsoft Outlook is installed with the *SCOoffice* Mail Server, the **Outlook Configuration Tool** automatically configures Outlook XP, Outlook 2000, and Outlook 98 clients for its calendar services. However, Outlook 2000 and Outlook 98 clients must be configured in Corporate/Workgroup mode to use the *SCOoffice*<sup>TM</sup> Mail Connector. If *SCOoffice* Mail Connector for Microsoft Outlook is not installed, these clients must be configured in Internet Email Only mode. Outlook XP clients automatically configure themselves for the appropriate mode.

The **Outlook Configuration Tool** does not configure "free/busy" calendar functionality on Outlook 97 clients.

To use the **Outlook Configuration Tool**, simply click on Configure and follow the instructions on the screens.

#### Webmail clients

The IMP (Internet Messaging Program) webmail client is enabled by default in the SCOffice Mail Server. Client users can access the IMP webmail client by pointing their browsers at `https://hostname/horde/imp` and entering their SCOffice Mail Server account information. For more information, see "Enabling Webmail Service" in the *Administrator's Guide*.

#### Other mail clients

Netscape Messenger, Eudora, and KMail client users must copy the information from the Client Setup screen into their client configuration options screens. Online Help screens in the **Preferences Manager** provide detailed configuration instructions from the *Client User's Guide*.

For more information, see "Enabling Mail Client Users" in the *Administrator's Guide*.

## Managing Mail Client Users

If granted User Access privileges, mail client users can set their own mail preferences with the **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:

#### 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.
	Create Alias	Allows you to create aliases.

Help screens are also available from the user preferences page.

# 6 Calendar Configuration

This chapter describes SCOoffice Mail Server integrated calendar support for:

- Outlook Free/Busy Calendaring.
- SCOoffice Mail Connector for Microsoft Outlook.

## Outlook Free/Busy Calendaring

To provide Free/Busy calendar support to Outlook clients:

- review Free/Busy calendar **ftp** server functionality.
- direct client users to publish their Free/Busy information.

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

### About the Free/Busy Calendar ftp Server

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:** The SCOoffice Mail Server enables **ftp** service to support Free/Busy calendaring for other iCalendar compatible mail clients such as Microsoft Outlook. However, be aware that **ftp** presents potential security problems in an Internet environment. For LAN usage, the best way around this is to simply secure your network **ftp** port from external connections. If you are providing this service over the Internet, you might want to investigate a Virtual Private Network (VPN) solution.

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 SCOoffice Mail 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”).

For Outlook 2000 and XP clients, the **Outlook Configuration Tool** configures Web-DAV, which provides secure, efficient transfers over HTTP and automatic client authentication. It configures these Free/Busy parameters:

*Publish at this URL*      `http://hostname/pub/calendar/userid.vfb`

*Search at this URL*      `http://hostname/calendar/%NAME%.vfb`

When calendar information is first published, Outlook prompts for the SCOoffice Mail Server UserID password.

For Outlook 98 clients, the **Outlook Configuration Tool** configures these Free/Busy parameters:

*Publish at this URL*      `ftp://userid:password@hostname/pub/calendar/userid.vfb`

*Search at this URL*      `http://hostname/calendar/%NAME%.vfb`

- *hostname* is the SCOoffice Mail Server IP hostname and *%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. It is used in the search URL to locate Free/Busy information for a user that has been invited to a meeting. For example, Tom invites Betty to a meeting. Outlook substitutes `Betty` for `%NAME%`, then search for the file `Betty.vfb`, which contains the Free/Busy information for Betty.

- For Outlook 98 clients, *userid* is the user's SCOoffice Mail Server login name and *password* is their SCOoffice Mail Server password. They are used to publish to the shared directory on the SCOoffice Mail Server using **ftp**. The **ftp** service is configured to validate user access using the SCOoffice Mail Server's LDAP directory, which ensures that only valid mail users have access to this directory.

## 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 depending on their version of the Outlook client:

- |                             |  |
|-----------------------------|--|
| Outlook XP and Outlook 2000 | <ol style="list-style-type: none"><li>1. In the Outlook Tools, click on Options, then Calendar Options.</li><li>2. In the Free/Busy Options dialog box, check Publish my Free/Busy information.</li><li>3. Click on Apply to complete the procedure.</li></ol> |
|-----------------------------|--|

The first time you publish your calendar information, you will be prompted for your password.

- |            |   |
|------------|---|
| Outlook 98 | <ol style="list-style-type: none"><li>1. In the Outlook Tools, click on Options, then Calendar Options.</li><li>2. In the Free/Busy Options dialog box, check Publish my Free/Busy information.</li></ol> |
|------------|---|

3. Enter your *SCOoffice* Mail Server password in the `ftp://URL` in place of the string `password_for_yourname_here`.
4. Click on Apply to complete the procedure.

## ***SCOoffice* Mail Connector for Microsoft Outlook**

Shared calendar features can be made available through the separate *SCOoffice* Mail Connector for Microsoft Outlook product, which provides access to advanced features of Microsoft Outlook. *SCOoffice*<sup>TM</sup> Mail Connector provides complete mapping and synchronization of the user's mail and special folders to the Cyrus IMAP server using the IMAP protocol. This feature enables the sharing of the special folders such as calendar, contacts, journal, notes, and tasks.

*SCOoffice* Mail Connector for Microsoft Outlook is a separately licensed product provided on a separate CD with the *SCOoffice* Mail Server product. See the documentation on that CD for more information.