



Mac OS X Server

# Mail Services

Easy-to-manage Internet mail solutions featuring best-in-class open source technologies.

## Features

### Enterprise-class mail server

- High-performance Postfix SMTP services
- Scalable Cyrus IMAP and POP services
- Support for over 100,000 mail accounts with no per-user licensing fees
- Flexible mail storage and per-user quotas

### Strong authentication and security

- SSL/TLS encryption for secure transport of SMTP, POP, and IMAP mail
- Flexible authentication methods, including Kerberos, CRAM-MD5, and APOP
- Support for secure single sign-on for Mac and Windows clients

### Effective spam prevention

- Host- and network-based SMTP relay management
- Message refusal from real-time blacklists and specified hosts

### Mailing list support

- Python-based Mailman list manager
- Support for electronic mail discussion and newsletter lists
- Web interface for user management of account options

### Flexible webmail

- PHP-based SquirrelMail service
- Pure HTML 4.0 for maximum compatibility across browsers

### Administration and monitoring

- Easy-to-use Server Admin utility for configuring and managing mail services
- Real-time monitoring of mail connections, service logs, and messages
- Optional command-line administration

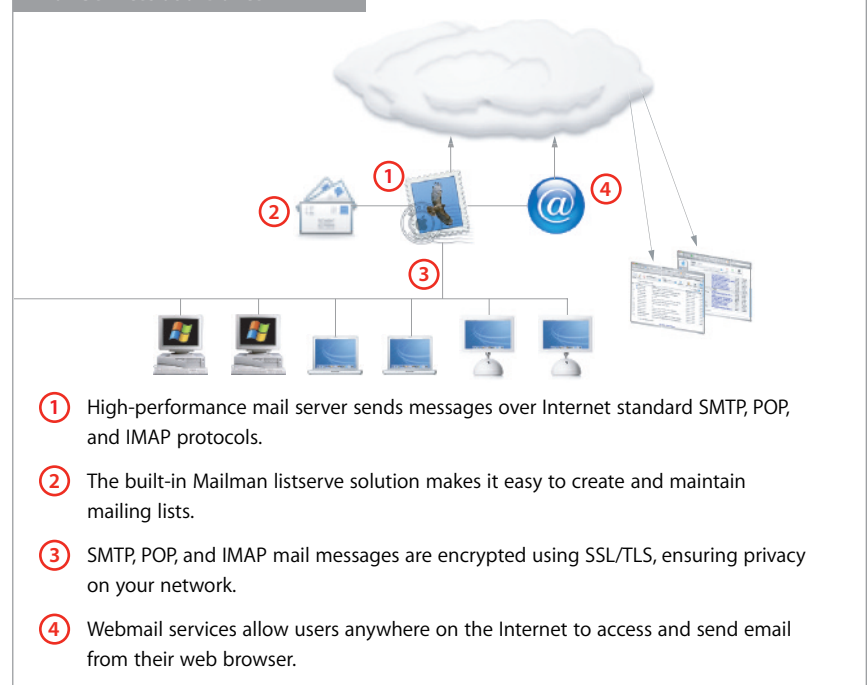
## Technology Brief

Mac OS X Server: Mail Services

Mac OS X Server combines the most robust technologies from the open source community to deliver comprehensive, easy-to-use mail server solutions. Full support for Internet mail protocols—Internet Message Access Protocol (IMAP), Post Office Protocol (POP), and Simple Mail Transfer Protocol (SMTP)—ensures compatibility with standards-based mail clients on Mac, Windows, and Linux systems. With support for thousands of users per server and no per-user licensing fees, these high-performance mail services offer significant cost savings for small organizations and large enterprises alike.

Core mail services in Mac OS X Server use the high-speed Postfix server for SMTP messaging and the scalable Cyrus mailbox server for accessing mail accounts via POP and IMAP. Flexible mail storage makes it easy to scale the mail server to meet growing needs, and high-performance indexing ensures continued responsiveness to client actions. To protect your network mail services from unauthorized access or abuse, Mac OS X Server includes built-in SSL/TLS encryption, strong authentication, and support for standards-based spam- and virus-filtering products. Completing its suite of robust mail solutions, Mac OS X Server includes Mailman, one of the most widely deployed listserve solutions in the world, and webmail services using the popular open source SquirrelMail project.

### Mail Services at a Glance



### **SendMail compatibility**

Postfix in Mac OS X Server v10.3 is a secure, compatible alternative to the widely used SendMail program. With support for existing SendMail infrastructures and scripts, in-place migration to the new mail server is easy.

## **Standards-Based Mail Services**

Mail services in Mac OS X Server are based entirely on open standards, providing compatibility with your existing network infrastructure, as well as with email clients on Mac, Windows, and Linux platforms. And because there are no per-user licensing fees, Mac OS X Server can scale to support hundreds of thousands of mail accounts—without draining your software licensing budget.

### **Robust Postfix and Cyrus mail services**

Mac OS X Server uses Postfix, a highly secure, high-performance mail server, as its SMTP mail transfer agent and Cyrus for scalable, enterprise-class IMAP and POP mail services. These powerful open source mail services are easy to configure and manage using the Server Admin utility built into Mac OS X Server.

### **Flexible mail storage and high-speed indexing**

Flexible storage options allow you to store mail on any volume connected to the server. Each message is stored as a separate file in a mail folder for each user. Regardless of where mail is stored or how large the storage volume, the integrated Berkeley DB database provides high-speed indexing of messages—ensuring quick response when clients access their mail, delete messages, and move files on the mail server.

### **Mailman mailing list server**

Mac OS X Server provides a graphical user interface for Mailman, one of the most widely deployed listserve solutions in the world. This enables you and the users on your network to distribute a single email message to multiple recipients. Mac OS X Server provides a web-based interface for end users, making it easy to create and maintain lists. In addition, you get robust features such as list archiving, content filtering, and digest delivery options.

### **Email encryption using SSL**

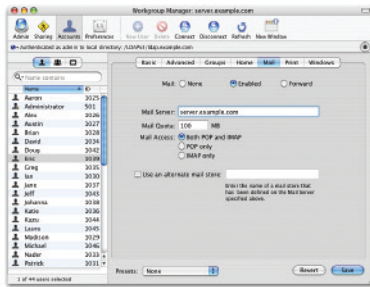
With SSL/TLS encryption for SMTP, POP, and IMAP, Mac OS X Server can encrypt the data sent between the server and the mail client. This allows secure and confidential transport of mail messages and attachments within a network. For maximum security, SSL can be required for communication on any protocol, including SMTP, POP, and IMAP.

### **Strong authentication to prevent unauthorized access**

Mac OS X Server simplifies administrative control of authentication levels. You can choose from Kerberos, CRAM-MD5, and APOP, depending on the needs of your organization. Fully integrated into Open Directory, Kerberos provides the added benefit of single sign-on—for both Mac and Windows users—to all “Kerberized” services across the network.

### **Webmail using SquirrelMail**

Webmail allows you to extend your mail services, enabling users to access their email from any standards-based browser. Apple’s webmail is based on SquirrelMail, an open source webmail package written in PHP 4, and provides all the functionality you would want from an email client—including support for MIME, address books, and folders for organizing stored messages. Since PHP is fully integrated with the Apache web server, webmail pages render in pure HTML 4.0—with no JavaScript required—for maximum compatibility across browsers. SquirrelMail is very easy to configure and works with any IMAP server.



### Directory-based account management

Workgroup Manager integrates seamlessly with Mac OS X Server mail services for simplified directory-based management of mail settings and policies. It allows you to create IMAP/POP accounts, enable mail services, set individual quotas, specify mail storage location, and define authentication methods. User account information is stored in Open Directory, Apple's standards-based directory services architecture that works with any LDAP server.

### Spam and virus protection

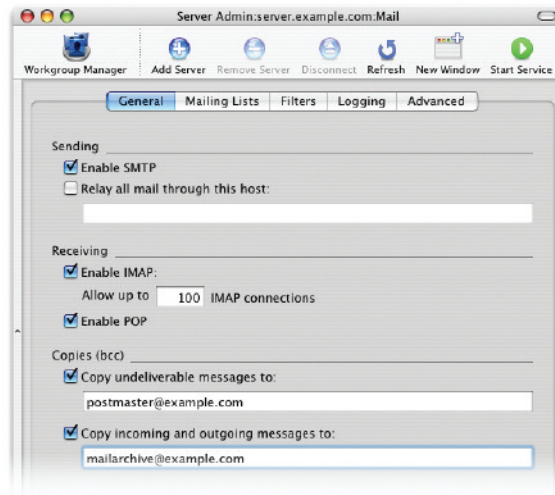
The Postfix mail server works with popular open source and third-party spam and virus protection products. These robust solutions scan incoming mail and filter out unwanted messages and attachments.

## Setting Up Mail Services

The Server Admin application in Mac OS X Server provides all the tools for configuring and delivering secure, authenticated mail services to users across your organization.

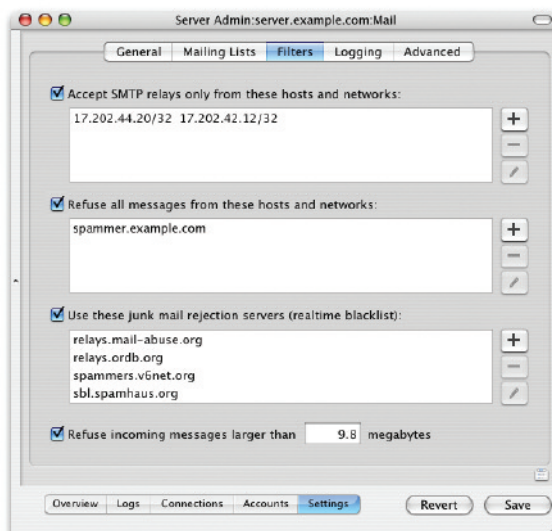
### Enabling services

Server Admin features an easy-to-use interface for setting up SMTP, POP, and IMAP services and managing mail settings. Simply select the protocols you want to enable and click the Start Service button. You can also define general postmaster settings, including the copying of undeliverable messages to a specified email address and archiving of incoming and outgoing messages.



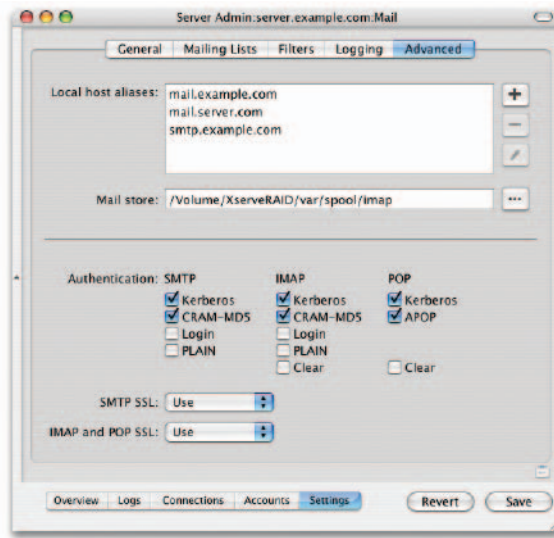
### Effective spam prevention

To reduce the abuse of your organization's mail services, Mac OS X Server has built-in features that can reject unsolicited email from both known and unknown sources. Mac OS X Server works with real-time blacklists and allows you to register your own junk mail blacklists—refusing incoming email traffic from these hosts. In addition, you can prevent unauthorized outsiders from using your server to send email, and you can choose to refuse email messages that exceed a specified file size.



### Advanced settings for mail services

The Server Admin utility also makes it easy to configure more advanced mail server options. For example, you can define multiple mail server host names, or virtual domains, for the local server, and you can choose authentication methods and security settings for each mail protocol. You can also designate any storage volume connected to the server as the default location for storing mail messages. Organizations handling high volumes of email or requiring data protection may choose to use a high-availability RAID solution, such as Xserve RAID, for mail storage.



### Remote Monitoring and Management

Server Admin enables you not only to configure mail services, but to securely monitor services and activity logs from any Mac OS X Panther system, anywhere on the Internet. Real-time data on service usage allows you to see who is connected, how long they've been connected, and the IP address of the client system. You can also review users' mail storage quotas and see how much disk space has been used. This extensive information can help you create usage reports and plan allocation of server resources for your organization. And for UNIX-savvy administrators who prefer a scriptable, command-line environment, all Server Admin capabilities are accessible from the Terminal application.

### Apple Server Solutions

Mail services are among the powerful workgroup and Internet solutions built into Apple's UNIX-based Mac OS X Server operating system. Combining the latest open source technologies with Macintosh ease of use, Mac OS X Server unleashes the power of Xserve, Apple's rack-optimized server hardware. With phenomenal performance, massive storage capacity, high-bandwidth I/O, and integrated remote management tools, Xserve running Mac OS X Server is an unparalleled server solution for businesses, schools, and research centers.



### For More Information

For more information about Mac OS X Server, please visit:  
[www.m-i-s.co.uk/X](http://www.m-i-s.co.uk/X)

© 2003 Apple Computer, Inc. All rights reserved. Apple, the Apple logo, Mac, Macintosh, Mac OS, and Xserve are trademarks of Apple Computer, Inc., registered in the U.S. and other countries. Other product and company names mentioned herein may be trademarks of their respective companies. Product specifications are subject to change without notice. This material is provided for information purposes only; Apple assumes no liability related to its use. November 2003 L31750B