

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
- Virtual host support for multiple domains
- 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

Protection against junk mail and viruses

- Junk mail filtering using SpamAssassin
- Virus detection and quarantine using ClamAV
- 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

Flexible webmail

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

Administration and monitoring

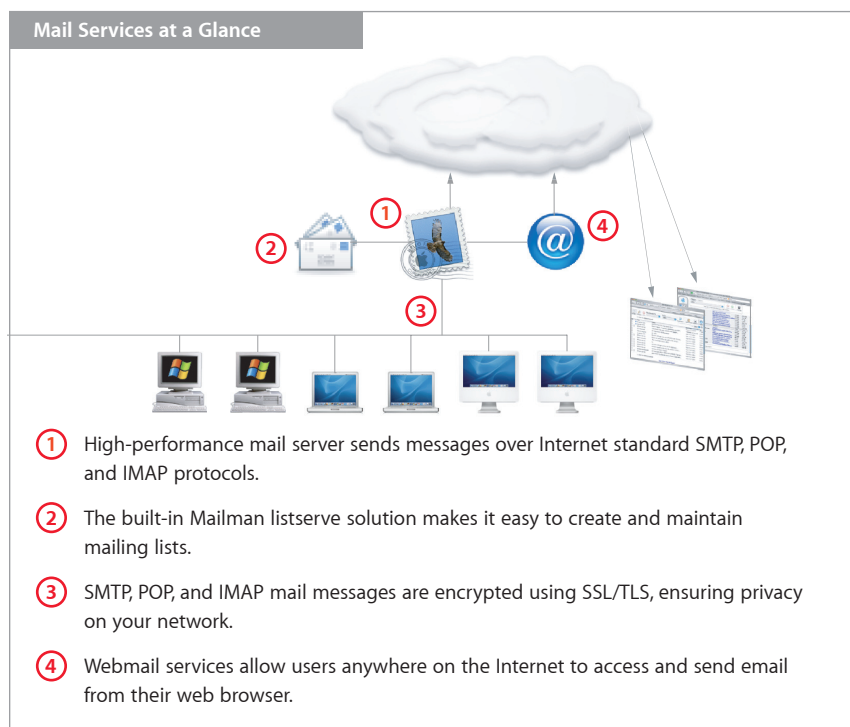
- Easy-to-use Server Admin utility for configuring and managing mail services
- Real-time monitoring of mail connections, service logs, and messages

Technology Brief

Mac OS X: 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 guard your network mail services against unauthorized access or abuse, Mac OS X Server version 10.4 builds in strong authentication, SSL/TLS encryption, adaptive junk mail filtering using SpamAssassin, and virus detection using ClamAV. 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.



SendMail compatibility

Postfix in Mac OS X Server is a more 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 listserv 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

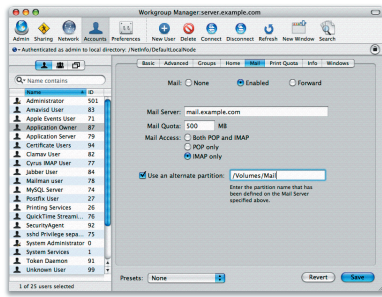
With SSL/TLS encryption for SMTP, POP, and IMAP, Mac OS X Server can encrypt the data sent between the server and the mail client. This allows secure and confidential transport of mail messages and attachments within a network. For maximum security, SSL can be required for communication on any protocol,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

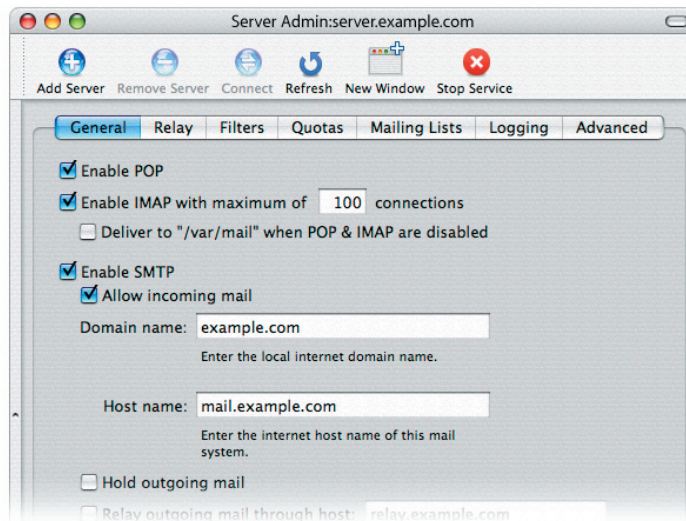
Workgroup Manager integrates seamlessly with Mac OS X Server mail services for simplified directory-based management of mail settings and policies. It allows you to create IMAP/POP accounts, enable mail services, set individual quotas, specify mail storage location, and define authentication methods.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

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.

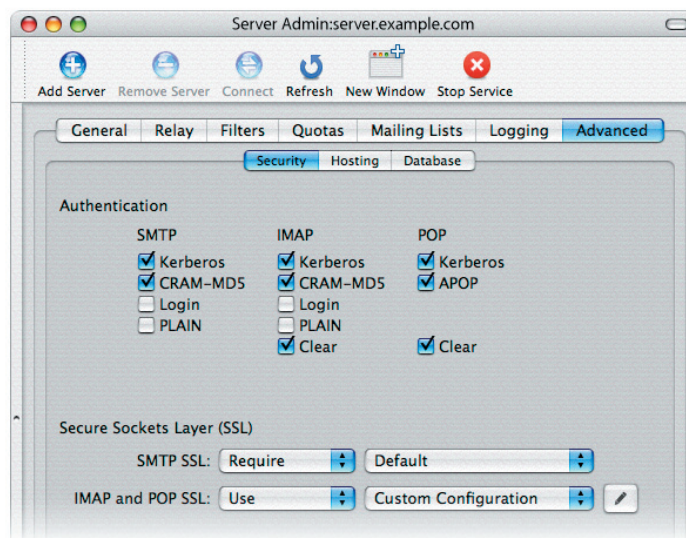
Enabling services

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.



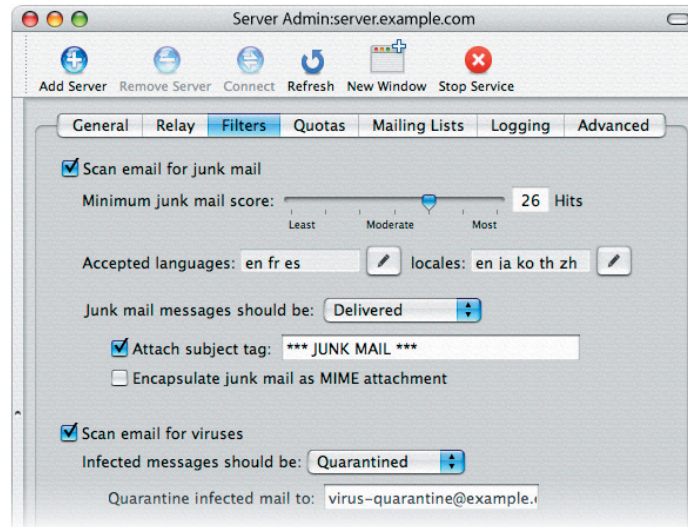
Advanced settings for mail services

Server Admin 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.



Protection Against Junk Mail and Viruses

To protect your organization from unwanted mail and destructive viruses, Mac OS X Server v10.4 integrates two popular open source projects: SpamAssassin for adaptive junk mail filtering and ClamAV for virus detection and quarantine.



With SpamAssassin, Mac OS X Server analyzes the text of each mail message. Using a wide variety of local and network tests, it assigns a probability rating that the mail is spam. If the probability is high, it classifies the mail as potential junk mail and allows the user to decide how to handle it. The SpamAssassin junk mail filter is adaptive, which means you can train it to recognize which marginal mail messages are spam and which are not. Training can be automatic: SpamAssassin can analyze the content of user inboxes every night and adapt its filters accordingly. Or for greater control, postmasters and users may prefer to train SpamAssassin manually.

Mac OS X Server uses ClamAV to scan mail messages and attachments for viruses. Administrators can choose how to handle a suspected virus: The mail server can bounce the message back to the sender, delete the message immediately, or quarantine the message to a specific directory for further analysis. The server can also generate an automatic email notifying a postmaster or sender that the message has been quarantined.

In addition to these new capabilities, 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. It's also easy to prevent unauthorized outsiders from using your server to send email, and you can choose to refuse email messages that exceed a specified file size.

Certificate management

The Server Admin application in Mac OS X Server v10.4 includes a new certificate management interface. It lists all of your certificates in one location, identifying the certificate authority, date of validation, and date of expiration. For each service that uses certificates, Server Admin displays a list of available certificates, making it easy to select and manage all of your server's certificates.

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 v10.4 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 Mac ease of use, Mac OS X Server unleashes the power of Xserve G5, Apple's rack-optimized server hardware. With phenomenal performance, massive storage capacity, high-bandwidth I/O, and integrated remote management tools, Xserve G5 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, Xserve, and other Apple server solutions, visit www.apple.com/server.

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