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## Tech Info Library

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### TITLE

Mac OS X Server: Services FAQ

Article ID: 60167  
Created: 3/18/99  
Modified: 4/19/99

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### TOPIC

This article contains frequently asked questions about Mac OS X Server. See also Tech Info Library articles:

Article 60165: "[Mac OS X Server: General FAQ](#)"

Article 60166: "[Mac OS X Server: Operating System FAQ](#)"

Article 60168: "[Mac OS X Server: NetBoot/Macintosh Manager FAQ](#)"

Article 60169: "[Mac OS X Server: Hardware and Compatibility FAQ](#)"

Article 60170: "[Mac OS X Server: Pricing and Availability FAQ](#)"

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### DISCUSSION

#### Q. What are the key services provided with Mac OS X Server?

- A. There are four primary services in this release of Mac OS X Server:
- Apache Web server
  - WebObjects network application services
  - NetBoot and Macintosh Management server software for workgroup administration
  - Apple file services

#### Q. What is Apache?

A. Apache is today's most popular Web server, serving over half of the public Web sites on the Internet. Apache is an open-source HTTP server developed by the Apache Group ([www.apache.org](http://www.apache.org)). The Apache source code is freely available, making it easy for a large community to assist in fixing bugs, porting to new platforms, and customizing for special purposes.

#### Q. What version of Apache is included in Mac OS X Server?

A. Mac OS X Server includes Apache 1.3.4, the latest version available at the time of release. We are working with the Apache Group to ensure that future versions of Apache will compile directly on Mac OS X Server.

#### Q. How is Apache administered?

A. Basic administration of Apache is very simple. The Setup Assistant and control panels allow for easy on/off configuration, as well as selection of the hostname and documents director y. For advanced configuration, you can edit the same configuration files used by Apache on other platforms.

#### Q. What is WebObjects?

A. WebObjects is the industry's leading application server, with a flexible, scalable architecture for creating and deploying network applications. WebObjects provides a dynamic object-oriented environment for creating applications that can draw their data from a database server and run their user interface on any standard Web browser. WebObjects makes it easy to develop personalized content, e-commerce solutions, and MIS applications. For more information, see [www.apple.com/webobjects](http://www.apple.com/webobjects).

#### Q. Which version of WebObjects is included with Mac OS X Server?

A. Mac OS X Server includes WebObjects 4.0.1, along with a 50-transaction-per-minute deployment license. The deployment license can be used for testing or for low-volume usage, or it can be upgraded for full-scale Internet deployment. For the first release of Mac OS X

Server, Apple is including all of the WebObjects developer tools. These tools can be used for compiling WebObjects network applications, database client/server applications, or UNIX server applications. The included license covers only the tools and runtimes for Mac OS X Server. WebObjects 4.0.1 for Windows NT and UNIX platforms will continue to be available as a separate product.

**Q. What is NetBoot?**

A. NetBoot is a revolutionary Apple technology for managing Macintosh networks. System and user files are stored on the server, bypassing the local hard disk drive, thus making it easy to centrally administer large networks of Macintosh clients. Mac OS X Server also includes Macintosh Manager, a tool for allowing users of both NetBoot and non-NetBoot client computers to access their personal files and desktop environment from anywhere on the network.

**Q. Which Apple file services are included?**

A. Mac OS X Server includes a high-performance native implementation of AFP, the Apple File Protocol, allowing it to share HFS Plus volumes with any AppleShare client over TCP/IP or AppleTalk. You need to update client systems to the latest AppleShare client (version 3.8.2 or later) to ensure reliability, performance, and security. User, group, and mountable volume information can be managed remotely using a Web-based remote-administration tool, similar to the one in AppleShare IP.

**Q. Can I transfer my AppleShare IP user and group information to Mac OS X Server?**

A. Yes. AppleShare IP includes the ability to export its user information, which can then be imported into Mac OS X Server. It does not export passwords and group information, however, so that information will need to be recreated.

**Q. Does Mac OS X Server support Windows clients via SMB file sharing?**

A. This version does not provide integrated support for native Windows (SMB) file sharing. However, Mac OS X Server can support Windows clients that function as AppleShare clients. Several third-party solutions should be available, including the free SAMBA server.

**Q. Is QuickTime streaming available with Mac OS X Server?**

A. A preview version of the QuickTime Streaming Server was included with Mac OS X Server. The final version of this software was released by Apple 19 April 1999 and is available for downloading from Apple Software Updates Online. Please see Software Updates Document Number 11366, or use your Web browser to access the article at: <http://asu.info.apple.com/swupdates.nsf/artnum/n11356>. QuickTime 4 is required to view movies streamed by QuickTime Streaming Server. QuickTime 4 Pro is required to create streaming movies.

**Q. Is print spooling available?**

A. Yes. Macintosh customers can use the Desktop Printer Utility LPR support to connect to a Mac OS X Server print spooler. Mac OS X Server can spool files to any PostScript-capable network printer over either AppleTalk or TCP/IP. There are also a number of third-party print-spooling products available for the publishing industry.

**Q. How many clients can Mac OS X Server support?**

- A. The Macintosh Server G3 with Mac OS X Server configuration running a single service, if properly configured, can support:
- Millions of Web transactions a day
  - Approximately 50 NetBoot clients
  - Over a thousand AppleShare clients
  - Thousands of Macintosh Manager clients

The actual number of clients supported depends on your network environment, usage scenarios, and hardware configuration.

**Q. Can Mac OS X Server run all these services at the same time?**

A. Not quite. Thanks to the power of preemptive multitasking, you can efficiently run multiple services on a single server. However, this requires more memory than running a single service, and it reduces the maximum load sustainable by any given service. The exact details depend strongly on your usage patterns. More information on optimal configurations will be available in Apple's Tech Info Library at [til.info.apple.com](http://til.info.apple.com).

**Q. Do all these services use the same user and group information?**

A. No. Apple file services (and NFS) use the native users and groups based on NetInfo, allowing the information to be shared among computers. Macintosh Manager maintains its own user and group information, as does Apache. WebObjects applications can be designed to work with Apache users and groups, but often verify against the underlying database used by the application.

**Q. Is a backup utility available with Mac OS X Server?**

A. No. A native backup solution is being developed by the Omni Group and will be available free to Mac OS X Server customers at <http://www.omnigroup.com/Software/Backup>.

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**EXTENDED Information - Apple Internal Use - Service Providers and Support Professional**

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**Document Information**

Product Area: Mac OS System Software

Category: Mac OS X Server

Sub Category: General Topics

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