Apple Service - Troubleshoot and Repair

Tech Info Library

TITLE

Mac OS X Server: NetBoot/Macintosh Manager FAQ

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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 60167: **Mac OS X Server: Services FAQ**
Article 60169: **Mac OS X Server: Hardware and Compatibility FAQ**
Article 60170: **Mac OS X Server: Pricing and Availability FAQ**

DISCUSSION

Q. What are the advantages of the NetBoot server?

A. The NetBoot server makes it easy to manage a network of Macintosh computers. With a traditional network, adding an application or changing a system component requires administrators to physically update every computer on the network. NetBoot-capable Macintosh computers--called NetBoot clients--share the same System Folder and applications stored on the NetBoot server. Updating the shared System Folder or adding an application to the server immediately updates every NetBoot client on the network. The shared system components are protected to prevent users from corrupting the system. Since new NetBoot client computers on the network don't require any configuration, adding one system or creating a new lab of computers is fast and simple. Users also have access to their applications, documents, and personal desktop environment at any Macintosh on the network.

Q. Who should use the NetBoot server?

A. The NetBoot server is designed for any organization using Macintosh computers on a network. It helps educators bring technology to the classroom with low-cost, easy-to-manage computers like the iMac. NetBoot helps educators who want to:
  ○ Improve the student to computer ratio.
  ○ Achieve technology goals under tight fiscal constraints.
  ○ Reduce the cost of managing their computing infrastructure.
  ○ Use existing technology resources.

The NetBoot server is also ideal for business customers with Macintosh networks, particularly those who want to replace data entry or editorial terminals. It allows them to reduce their computer costs through low-cost Macintosh hardware and reduced administration requirements.

Q. What components are included with the NetBoot server?

A. The NetBoot server runs on Macintosh G3 computers with the Mac OS X Server operating system. NetBoot includes:
  ○ Three server applications: a BootP server, an AFP server, and a Macintosh Management server.
  ○ Mac OS 8.5.1 system software and accompanying applications used by the NetBoot client computers.
  ○ Two administration applications: NetBoot Desktop Admin for installing applications for use by NetBoot clients, and Macintosh Manager for administering users and groups on the network.

Q. What types of Macintosh computers can I use with the NetBoot server?

A. All iMac computers and the new Power Macintosh G3 (Blue and White) computers introduced at Macworld 1999 have the necessary hardware and firmware needed to support NetBoot. Future Macintosh computers may also be NetBoot-capable.

Q. What is Macintosh Manager, and how does it interact with At Ease for Workgroups?

A. Macintosh Manager is a technology for storing the user's computing environment on the server, so that the user can obtain his or her environment from any Macintosh on the network. This can include application preferences, desktop patterns, and fonts, depending on the level of customization allowed by the administrator. Macintosh Manager is based on, and can be considered a replacement for, At Ease for Workgroups, an earlier Apple product available only to education customers. Macintosh Manager on Mac OS X Server systems can serve both NetBoot and non-NetBoot clients.

Q. Can I manage non-NetBoot clients with Macintosh Manager?

A. Yes. An installer is provided that adds the necessary components to non-NetBoot Macintosh computers.

Q. Can other Mac systems be upgraded to support NetBoot?

A. No. Systems that are not NetBoot-capable can only take advantage of the file, Web, and Macintosh Management services of Mac OS X Server.

Q. How does a Macintosh start up from the network?

A. At startup, the NetBoot client computer broadcasts a BootP request on the network. BootP is a standard industry protocol for allowing computers to discover information about their network settings and the location of files to execute from a network server. The NetBoot server receives the BootP request and replies to the client's request with the information needed to start up. The client uses the information to configure its network settings and begins a TFTP download of the Mac OS into RAM. The client uses this file to finish booting.

Q. How do I set up a Macintosh to start up from the server?

A. A NetBoot-capable Macintosh requires no software setup to start up from the NetBoot server. To make a Macintosh boot the first time, hold down the N key until the Mac OS logo appears. After the computer is booted, simply set the Startup Disk Control Panel to start up from the network drive. From then on, the Macintosh will boot from the network without the aid of the N key.

Q. What version of the Mac OS runs on a NetBoot client?

A. NetBoot clients run Mac OS 8.5.1 with some minor modifications. These modifications allow the Macintosh to operate over the network and do not affect the user experience.

Q. Do I need special applications for NetBoot client computers?

A. NetBoot clients run most Macintosh applications available today. NetBoot does not include any special provisions for software licensing. You need to work with individual vendors to ensure that you have the appropriate number of licenses required by each application used on NetBoot clients.

Q. Does a NetBoot client use its own hard disk drive?

A. The NetBoot client does not normally use its hard disk drive. The NetBoot software includes a special system extension that unmounts the local hard disk drive, making it unavailable to the user. Administrators can disable this extension and make the local drive available for use. The local drive can be used normally for storing files and applications and providing disk space for the computer's virtual memory requirements.

Q. If there is no local hard disk drive, where are files stored?

A. In the NetBoot environment, every user has a home folder. These home folders can be located on the NetBoot server or on any AppleShare server connected to the network. The user's home folder appears on the desktop whenever the user logs in. Users can access their home folders via AppleShare from any Macintosh on the network, not just from NetBoot clients.

Q. Why do users log in to their computers?

A. The NetBoot server maintains a directory of users. When users log in, the server provides them with their personal desktop and data files, no matter which computer on the network they are using. It also provides a security mechanism for protecting the network from rogue users.

Q. What are the NetBoot server requirements?

A. The NetBoot server requires Mac OS X Server software running on a Macintosh G3 computer. The minimum recommended configuration is a 5GB hard disk and 64MB of RAM.

A server can support different quantities of client computers, depending on its configuration.

Q. What are the networking requirements?

A. The NetBoot server should connect to the network at no less than 100 Mbps for each connected port. NetBoot clients should also have at least 100-Mbps shared connections or 10-Mbps switched (dedicated) connections.

Q. Can NetBoot be used across the Internet?

A. No. Currently the NetBoot server is designed only for use on 100-Mbps Ethernet networks.

Q. Is Apple making "diskless" computers?

A. No. NetBoot gives users the flexibility to boot their computers from the local hard disk drive or from the NetBoot server.

Q. How does NetBoot relate to Apple Network Assistant and At Ease?

A. Apple has continually evolved Apple Network Assistant and At Ease for better system management of Macintosh clients. NetBoot takes system management one step further and introduces a new model for keeping Mac clients up to date. Many of the features in Apple Network Assistant and At Ease are incorporated in NetBoot. Apple will continue to develop these products to support Mac clients that are not NetBoot-capable.

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

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