



Mac OS X Server Installation Manual

Mac OS X Server Installation manual for Power Macintosh computers

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Welcome to Mac OS X Server

System Requirements

To use Mac OS X Server you must have one of the following computers:

- Macintosh Server G3
- Power Macintosh G3 (desktop, minitower, or all-in-one model)
- Power Macintosh 9600
- Power Macintosh 8600
- Power Macintosh 7300/200
- Power Macintosh 7300/180

Your computer must have

- at least 32 megabytes (MB) of random-access memory (RAM)
- a hard disk with at least 500 MB of available space (1 gigabyte (GB) recommended)
- internal video or an Apple-supplied video card

Mac OS X Server works with the internal video of the Macintosh Server G3, Power Macintosh G3, Power Macintosh 8600, and Power Macintosh 7300 and the video card that comes with the Power Macintosh 9600. Many other types of PCI video cards may also work, but they have not been tested with Mac OS X Server.

Important For the latest information about supported systems, see:
<http://www.apple.com/support/>

About Your Hard Disk

If you are installing Mac OS X Server on an external hard disk, make sure the SCSI ID number of the disk is the ID number you plan on using after installation. If you change the disk's ID number after installation, you'll need to use the System Disk application to reselect the Mac OS X Server boot device. See "Using the System Disk Program to Select a Startup Disk" on page 15 for details.

Partitioning Your Hard Disk

If you want to store Mac OS programs and files on your hard disk, or you want to use the MacOS.app program to use Mac OS software, you must partition your hard disk.

Use a Mac OS utility such as Drive Setup (provided on the installation CD) to create at least two Mac OS partitions. One partition must be at least 1 GB. It will be reformatted by the Mac OS X Server Installer. The other partitions will not be changed.

If you have previously installed Mac OS X Server on your computer, you can should reuse the existing Mac OS X Server partition. Installation will erase all the files on the partition, so make sure to back up any files you want to keep.

Using AppleVision or Apple ColorSync Monitors

If you have an AppleVision or Apple ColorSync Display, make sure the monitor's ADB cable is connected to the ADB port on the back of the computer. Otherwise, the monitor may not respond when you start up the computer. (See Chapter 4, "Troubleshooting," if this occurs.) The documentation that came with your monitor has information about how to connect the ADB cable.

Installing Mac OS X Server

Important Read and follow all the steps discussed in Chapter 1 before continuing.

Starting Up From the Mac OS X Server CD

You must start up your computer using the Mac OS X Server CD to install the software. Follow these steps:

- 1** Insert the CD in your computer's CD-ROM drive.
- 2** Restart the computer.
- 3** Hold down the C key while the computer starts up.

Your computer starts up from the CD-ROM disc. Continue holding down the C key until you see the message “Welcome to Mac OS.”

Installing the Software

After you've started up your computer with the Mac OS X Server CD, use the Install program to install the software.

- 1 Open the Mac OS X Server Install folder on the CD, then double-click the Install Mac OS X Server icon.

Select the language you want to use. A screen appears describing the steps in the installation process.



- 2 Click Continue to begin, then follow the instructions you see onscreen.
- 3 The Installer guides you through the steps necessary to install the software. To learn more about each step, click the Help button (🔍) in the upper-right corner of the window.

Warning Once installation has begun, don't click Quit or Stop. This may leave your hard disk in an unusable state. If this happens, you'll need to start the installation from the beginning.

Restarting After Installation

When the installation is finished, a message appears on your screen.

- 1** Click Restart.

After the computer restarts you may see a message about starting up in non-network mode. This is normal and occurs if your computer is not connected to a NetInfo (Mac OS X Server) network, or if the NetInfo server has not been set up to provide services to your computer.

- 2** Enter Y to continue with the installation.

You will still be able to configure and use other types of networking.

After the computer starts up, the Setup Assistant opens automatically. There may be a long delay before it appears. Do not turn off or restart your computer.

See Chapter 3, “After Installing Mac OS X Server,” for information about configuring and using your computer.

After Installing Mac OS X Server

Using the Setup Assistant

The Setup Assistant makes it easy to configure your computer. The assistant asks you questions about yourself, your location, and the settings you want for your computer. Then the assistant configures your computer using the answers you provided. You can use the Setup Assistant anytime you want to change the settings for your computer.

Note: If you are configuring this computer for use as a NetInfo server, select “No network connection” in the Network Connection section of the Setup Assistant. Then, follow the instructions for configuring a NetInfo server in the onscreen Network Administration Help.

Assigning Passwords

Mac OS X Server is a multi-user operating system. Users must log in with a user name and password before they can access the computer. When you use the Setup Assistant, you specify a user name and password for one user. If you select the Automatic Login option, then you are automatically logged in using this account when you start up the computer.

Tip: To temporarily turn off automatic login so you can log in with a different account, restart the computer, then hold down the mouse button until the login window appears.

You can create additional user accounts with the Network Manager application, located in the /System/Administration folder. You must know the Administrator, or “root,” password to create accounts. For help, double-click NetAdmin.help, located in the /System/Administration folder.

About the Administrator Account

The Administrator account, also known as the “root” account, is the most powerful account on your computer. Someone using this account has authority over the entire computer and can move, delete, or change any file. Depending on how your network is configured, the Administrator may also have authority over other computers. You should use the Administrator account only when necessary, and only for very specific, short tasks that you are confident in doing. It is not necessary to use the Administrator account for tasks other than administering your computer or network. Keep the Administrator password a closely guarded secret, particularly if your computer is connected to a network or the Internet.

Where to Find Help

Refer to these valuable sources of information about using your computer.

Onscreen Help

The Help menu is your main source of “how to” information about Mac OS X Server. Many application programs also have onscreen help.

To view onscreen help, switch to the program you want to use, then look in the Help menu.

Late-Breaking News

If you have questions about compatibility or other late-breaking news about your software, refer to the Read Me documents and release notes in the /System/Documentation folder on your hard disk and on the Mac OS X Server CD.

Updates and News on the Internet

Updates to the documentation, additional documentation, tips, patches, and demo applications and source code are available on the Apple Support Web site, located at the following address: <http://www.apple.com/support/>

Troubleshooting

If you encounter problems when installing or using Mac OS X Server, read this chapter for solutions.

The monitor screen is black.

Cause 1: The monitor is turned off, the brightness is too low, or the screen is dimmed because the computer is idle.

Solution 1: Make sure the monitor is properly connected and adjusted. The computer automatically dims the display when left idle. Press any key to set the display to normal. You set the dimming interval in the Monitor module of the Preferences.app program.

Cause 2: You have an unsupported video card in your computer.

Solution 2: Shut down your computer by halting Mac OS X Server, then remove the video card. See “Halting Mac OS X Server and Restarting From the CD” on page 15. See “System Requirements” on page 5 for information about supported video cards.

Cause 3: Your AppleVision or Apple ColorSync monitor is not properly connected.

Solution 3: Make sure the monitor’s ADB cable is connected to the ADB port on the back of the computer. (Connect your keyboard to the ADB port on the monitor.)

Cause 4: You used the Preferences.app program to select a monitor resolution setting that is not supported by your monitor.

Solution 4: Shut down your computer by halting Mac OS X Server, then restart the computer using the Mac OS X Server CD. This will reset your monitor. Then use the System Disk application to select your Mac OS X Server hard disk as the startup disk, and restart your computer. See “Halting Mac OS X Server and Restarting From the CD” on page 15 and “Using the System Disk Program to Select a Startup Disk” on page 15.

Cause 5: You changed the SCSI ID number of your Mac OS X Server hard disk.

Solution 5: Shut down your computer by halting Mac OS X Server, then restart your computer using the Mac OS X Server CD. Use the System Disk application program to select your Mac OS X Server hard disk, then restart the computer. See “Halting Mac OS X Server and Restarting From the CD” on page 15 and “Using the System Disk Program to Select a Startup Disk” on page 15.

You can't log in to Mac OS X Server.

Cause 1: You can't log in using another account because automatic login is turned on.

Solution 1: To temporarily bypass automatic login, hold down the mouse button when you start up your computer. If you want to turn off automatic login, log in as the Administrator, then open the Setup Assistant, located in the /System/Administration folder, and turn off the Automatic Login option.

Cause 2: You've forgotten your password.

Solution 2: Make sure you are entering your password correctly, using the same capitalization and punctuation that you originally used. If you still can't log in, log in as Administrator and reset the password for your user account using NetworkManager.app, located in the /System/Administration folder.

You can't start up the computer.

Cause 1: The startup disk is damaged because Mac OS X Server was not properly shut down.

Solution 1: Start up the computer in single user mode, then use the fsck command to repair the hard disk. See “Repairing Disks” on page 16.

Cause 2: The startup disk does not have enough space available to open the files necessary to start up the computer.

Solution 2: Start up the computer in single user mode, then use the fsck command to repair the disk. Then use the rm command to delete files so there is more space available on the disk. See “Repairing Disks” on page 16.

You can't restart or shut down the computer.

Cause 1: There is not enough space available on the startup disk to save the information necessary to shut down the computer.

Solution 1: Make more space available on the startup disk by deleting files you no longer need.

Cause 2: The Administrator has disabled the Shut Down command for your computer.

Solution 2: Log in as Administrator, then open Preferences.app and choose Login Window. Remove the checkbox from the Power Off setting.

The computer begins to start up, then won't respond.

Cause: Mac OS X Server is looking for a NetInfo server, but you do not have a NetInfo server on your network, or the NetInfo server is not configured to provide services to your machine.

Solution: Disconnect the computer's Ethernet connection, then enter Y when asked if you want to continue in non-network mode. Log in as Administrator. Open the Preferences.app, then open Network. Make sure the Domain Name Servers option is not set to Using NetInfo.

Halting Mac OS X Server and Restarting From the CD

Warning This method of stopping Mac OS X Server may result in data loss or disk corruption. It should only be used as a last resort. If possible, quit all applications and processes before following these instructions.

- 1** Open the CD-ROM drive and put the Mac OS X Server CD in the drive's tray.
Do not close the CD tray.
- 2** Press Control-Power, then press the H key.
After a moment, your computer turns off.
- 3** Gently close the CD-ROM drive.
- 4** Turn on the computer, then hold down the C key.
Continue holding the C key until you see the message "Welcome to Mac OS."

Using the System Disk Program to Select a Startup Disk

System Disk is a Mac OS program that allows you to select which hard disk your computer will start up from. You use System Disk to select your Mac OS X Server hard disk as your startup disk. You cannot use the Mac OS Startup Disk control panel to select a Mac OS X Server disk; you must use System Disk instead.

- 1** Open the System Disk application program.
The program is provided on the Mac OS X Server CD.
- 2** In the list of devices, choose your Mac OS X Server hard disk.
- 3** Click Save.
This configures your computer to use Mac OS X Server the next time you restart your computer.
- 4** Restart your computer.

Repairing Disks

You use the `fsck` command to repair corrupted or damaged hard disks.

- 1 Restart the computer, then hold down the S key until your screen displays several scrolling messages.

This starts up your computer in single user mode, which allows access to the command line.

- 2 At the `#` prompt, enter `fsck -y` and press Return.

The `fsck` program checks and repairs your hard disk. If you see an error message, enter the command again. You may have to do this a few times to repair all the damage.

- 3 If you want to delete files to free up available space on your hard disk, enter `mount -w /` then use the `rm` command to delete files you are sure you no longer need.

For more information on `rm`, enter `man rm`. You can see a list of files by entering `ls`. To change directories, enter `cd directory`, where *directory* is the name of the directory you want to change to. You must enter the name of the directory exactly as shown on your screen.

- 4 When you're finished, enter `exit` to continue starting up Mac OS X Server.

Mac OS X Server Shortcuts

Shortcut	Effect
Hold down the S key while the computer starts up.	Starts the computer in single user mode so you can use the command line. Enter <code>exit</code> to continue startup.
Hold down the V key while the computer starts up.	Displays diagnostic and status messages during startup.
Hold down the C key while the computer starts up.	The computer uses the CD as the startup disk.
Hold down the M key while the computer starts up.	The computer starts up with Mac OS. You must have a Mac OS hard disk or CD with a System Folder to use this option.
Press Command-Return.	Switches from MacOS.app to the Workspace Manager. The MacOS.app program must be active when you press the keys.

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