



Macintosh Server G4 with AppleShare IP FAQ

Hardware Information

Q. What are the features of the new Macintosh Server G4?

A. The Macintosh Server G4 is now able to serve your intranet or Internet even faster, with a 533-megahertz PowerPC G4 processor and faster system architecture, featuring a 133-megahertz system bus, PCI throughput up to 215 megabytes per second, and built-in 10/100/1000BASE-T Ethernet.

Q. How much and what kind of memory does the Macintosh Server G4 support?

A. The Macintosh Server G4 comes standard with 128 megabytes of memory. It has three DIMM slots that support up to 1.5 gigabytes of PC133 SDRAM (999MB maximum per application in Mac OS 9).

Q. What expansion capabilities does the Macintosh Server G4 offer?

A. USB and FireWire provide two avenues to easily expand the functionality of your Macintosh Server G4 through third-party peripherals. The Macintosh Server G4 also has four PCI slots and one AGP 4X slot preconfigured with an ATI RAGE 128 Pro graphics card. The Macintosh Server G4 comes with five expansion bays: two bays for removable media (such as the CD-ROM drive) and three bays for internal hard disk drives.

Q. What display connectors are included in the Macintosh Server G4?

A. The Macintosh Server G4 comes with an ATI RAGE 128 Pro graphics card that has two connectors: a standard VGA connector and an Apple Display Connector (ADC). To connect an older Apple monitor with a DVI connector, you will need an adapter. For availability, check www.apple.com/store.

Q. Can the Macintosh Server G4 work without a monitor attached?

A. Yes. The Macintosh Server G4 can operate without a monitor attached, in a “headless” mode.

Q. Is there a Macintosh Server G4 configuration with dual processors?

A. AppleShare IP does not take advantage of dual processing.



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Gigabit Ethernet

Q. What is Gigabit Ethernet?

A. Gigabit Ethernet over copper cabling is the next-generation networking standard, based on the IEEE 802.3ab standard approved by the IEEE organization. It provides a theoretical, raw data bandwidth of 1000 megabits per second (Mbps), or 1 gigabit per second.* As network bandwidth becomes strained by new network applications and the proliferation of rich media data types, Gigabit Ethernet can be a cost-effective method of alleviating workflow bottlenecks. For more information, see www.gigabit-ethernet.org.

Q. How fast is Gigabit Ethernet?

A. The theoretical performance limit of Gigabit Ethernet is 1000 Mbps. Actual performance varies because network throughput depends on your hardware configuration, network infrastructure, and software. To utilize bandwidth beyond 100 Mbps, Gigabit Ethernet requires Gigabit Ethernet switches and routers.

Q. What are the differences between Gigabit Ethernet (1000BASE-T) and standard 10BASE-T or Fast 100BASE-T Ethernet?

A. Gigabit Ethernet increases the speed at which the data is transmitted. Other features are identical and faithful to Ethernet standards, ensuring that existing network services and protocols will work identically between standard, Fast, and Gigabit Ethernet. The features common among all Ethernet types include access method, packet format, packet length, error control, back-off algorithm, and management information.

Q. What are the differences between 1000BASE-T and 1000BASE-SX Gigabit Ethernet?

A. 1000BASE-T Ethernet uses copper cabling in lengths up to 100 meters. 1000BASE-SX Ethernet relies on more expensive fiber cabling in lengths up to 550 meters and is sufficiently robust to run between buildings. PCI expansion cards for 1000BASE-SX Ethernet are available for the Macintosh Server G4 from such vendors as Asante, Farallon, and Team ASA.

Switches and routers can be used to bridge 1000BASE-T and 1000BASE-SX networks. These are readily available from network hardware vendors, such as Hewlett-Packard and Cisco.

Q. Does Gigabit Ethernet on the Macintosh Server G4 support both half-duplex and full-duplex modes?

A. Yes. Gigabit Ethernet on the Macintosh Server G4 automatically senses what mode your network supports. However, you cannot switch manually between half- and full-duplex modes.

Q. Does the new Macintosh Server G4 automatically switch between 10 Mbps, 100 Mbps, and 1000 Mbps?

A. Yes. Gigabit Ethernet built into the new Macintosh Server G4 automatically senses what type of network you are on and operates at that speed.



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Software Information

Q. What software comes with the Macintosh Server G4?

A. All Macintosh Server G4 systems come with Mac OS 9.1 (preinstalled), a 500-client license for AppleShare IP 6.3.3 (preinstalled), Macintosh Manager 1.3, Macintosh Management Server 1.2.2, a Network Assistant 4 administration CD, Netscape Communicator, and Microsoft Internet Explorer. Configurations with multiple SCSI hard disk drives come with SoftRAID.

AppleShare IP is Apple's award-winning server software that provides easy-to-use file, print, web, and mail services. This latest version supports features such as web administration, firewall capabilities using IP filtering, server-side searching for locating content more easily, and file- and print-sharing support for Windows clients.

Network Assistant and Macintosh Manager are powerful help desk and lab administration tools for systems management. They allow you to centrally manage remote workstations, profile systems and change system settings, install software, prevent unauthorized access to applications and files, and screen-share and control client workstations. The Network Assistant CD includes the administration application to manage Mac OS 9 clients, as well as a client updater for customers using Network Assistant 3.5. The Macintosh Manager installers are on the server hard drive, as well as included on the Macintosh Server Install and Restore CDs.

SoftRAID allows you to stripe or mirror (RAID 0 and 1) Macintosh Server G4 systems with multiple SCSI hard disk drives. Striping provides optimal disk performance; mirroring provides disk redundancy so that if one drive fails, a second drive will automatically take over without data loss.

Q. Who supports the software bundled with the Macintosh Server G4?

A. Apple supports Mac OS 9, AppleShare IP, Network Assistant, Macintosh Manager, Macintosh Management Server, and SoftRAID. All third-party software applications are supported by their respective developers.

Q. What are the differences between AppleShare IP 6.3.3 and the version of AppleShare IP on previous Macintosh Server G4 systems?

A. AppleShare IP 6.3.3 integrates all of the updates that were introduced in versions 6.3.1 and 6.3.2. AppleShare IP 6.3.3 also increases stability and provides additional compatibility with PC clients. Maximum simultaneous Server Message Block (SMB) connections have been increased to more than 244, and SMB clients can now change folder names on AppleShare IP sharepoints after their creation.

Q. How does AppleShare IP differ from Mac OS X Server 1.2?

A. The two systems offer different types of services. AppleShare IP is general-purpose server software that includes a fully integrated set of services based on the Mac OS 9 operating system, delivering high performance and exceptional ease of use. Some key services are unique to AppleShare IP, such as mail servers, SMB support, and firewalls.

Mac OS X Server 1.2 provides innovative services such as an Apache web server, WebObjects network application services, QuickTime Streaming Server, and the revolutionary NetBoot server software for easily managing numerous Macintosh clients.



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Q. How does AppleShare IP differ from Mac OS X Server announced in January 2001?

A. The new Mac OS X Server announced in January 2001 is Apple's next-generation industrial-strength server platform. Built on an open source, UNIX-like foundation called Darwin, it features true systemwide memory protection, full preemptive multitasking, symmetric multi-processing, and advanced memory management. The new Mac OS X Server provides the latest in security standards and features operating system and service-level fault tolerance to minimize server downtime.

The Macintosh Server G4 will fully support the version of Mac OS X Server announced in January 2001 when it becomes available.

* Actual rates may be less, depending on conditions.

For More Information

For more information about the Macintosh Server G4 with AppleShare IP, visit www.apple.com/servers.

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