Mac OS X Server

Name
Title here
Apple Computer, Inc.

Mac OS X Server

Mac OS X Server

- Web and Internet solutions

- Publishing server and workflow solutions

- A new way to manage Mac workgroups

Building a Powerful Server

- Modern foundation

- Open standards

- Internet and workgroup functionality

A Modern
Rock solid and fast!
Foundation

Rock Solid

- Protected memory
  - System is fully protected from applications
  - 4-gigabyte virtual address space

- Preemptive multitasking
  - Multiple services can efficiently share system resources
  - No single task can fully consume the processor

- Full process management
  - Start, stop, and monitor system and application tasks

Rock Solid

Advanced process management

Process Listing

Name	User	Status	%CPU	%Memory
WindowServer	demo	Running	17.6	18.5
Grab	demo	Running	15.8	7.1
ProcessViewer	demo	Running	3.7	5.4
Workspace	root	Running	1.5	5.4
lookupd	root	Running	0.2	1.6
tcsh	demo	Running	0.0	1.3
loginwindow	root	Running	0.0	4.5
apache	www	Running	0.0	0.2
desksrv	root	Running	0.0	1.2
AppleFileServer	root	Running	0.0	0.3
pbs	demo	Running	0.0	2.1
npd	root	Running	0.0	0.4
ksd	root	Running	0.0	0.3
Terminal	demo	Running	0.0	5.1
ks	root	Running	0.0	0.8

Find:

Show: All Processes

76 processes.

Sample every 5 seconds

▽ Less Info

Process ID / Statistics / Path & Arguments
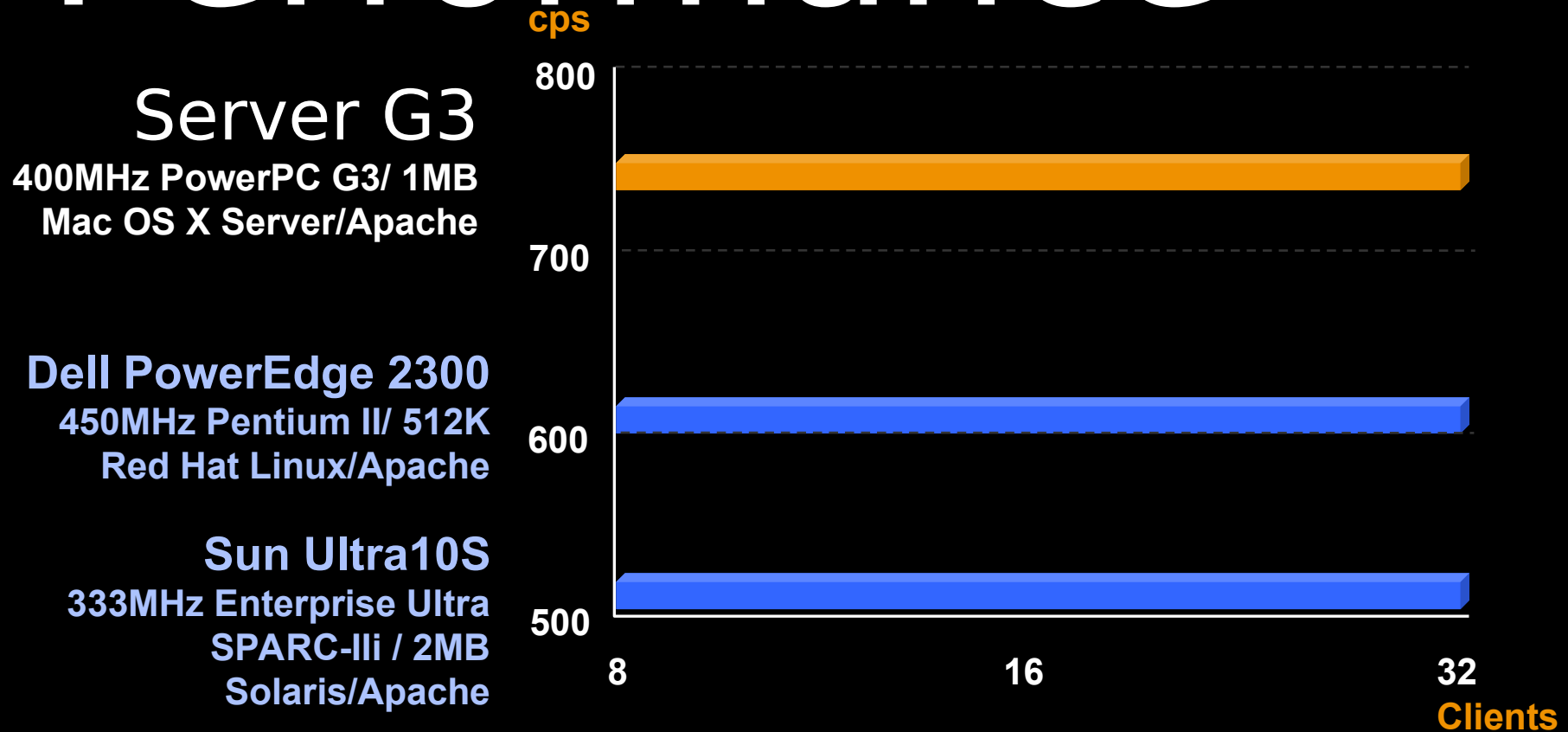
Total CPU Time: 0:00

Fast

Modern architecture, fully PowerPC native

- Multithreaded and concurrent I/O
  - Multiple network and SCSI controllers fully utilized
  - 4-port Ethernet card included with Macintosh Server G3

- Optimized for file system and TCP/IP throughput
  - Web server performance
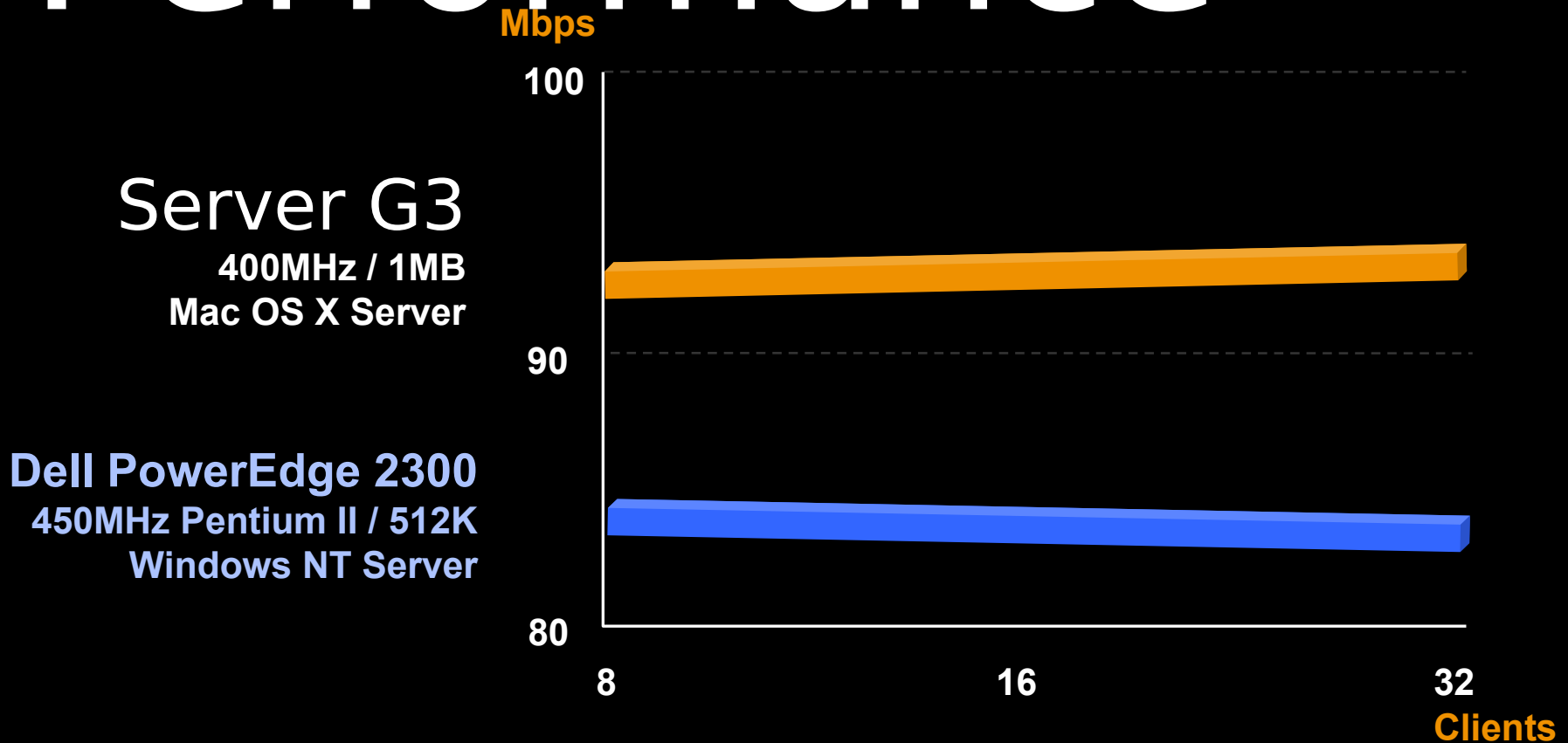 - Network file system throughput

Web Performance

Fastest Apache Web Server!

cps

Server G3
400MHz PowerPC G3/ 1MB
Mac OS X Server/Apache

Dell PowerEdge 2300
450MHz Pentium II/ 512K
Red Hat Linux/Apache

Sun Ultra10S
333MHz Enterprise Ultra
SPARC-IIi / 2MB
Solaris/Apache

800
700
600
500

8   16   32
Clients

WebBench static HTML throughput from 8, 16 & 32 PC clients in connections per second (cps) on 100Base-T Ethernet

Network Performance

Outperforms Windows NT Server!

Mbps

Server G3
400MHz / 1MB
Mac OS X Server

Dell PowerEdge 2300
450MHz Pentium II / 512K
Windows NT Server

100

90

80

8   16   32

Clients

NetBench Sequential Read test of network throughput from 8, 16 & 32 Mac clients in Megabits per second (Mbps) on 100Base-T Ethernet

Power Made Easy

Easy, Mac-like installation and setup

5 Minutes

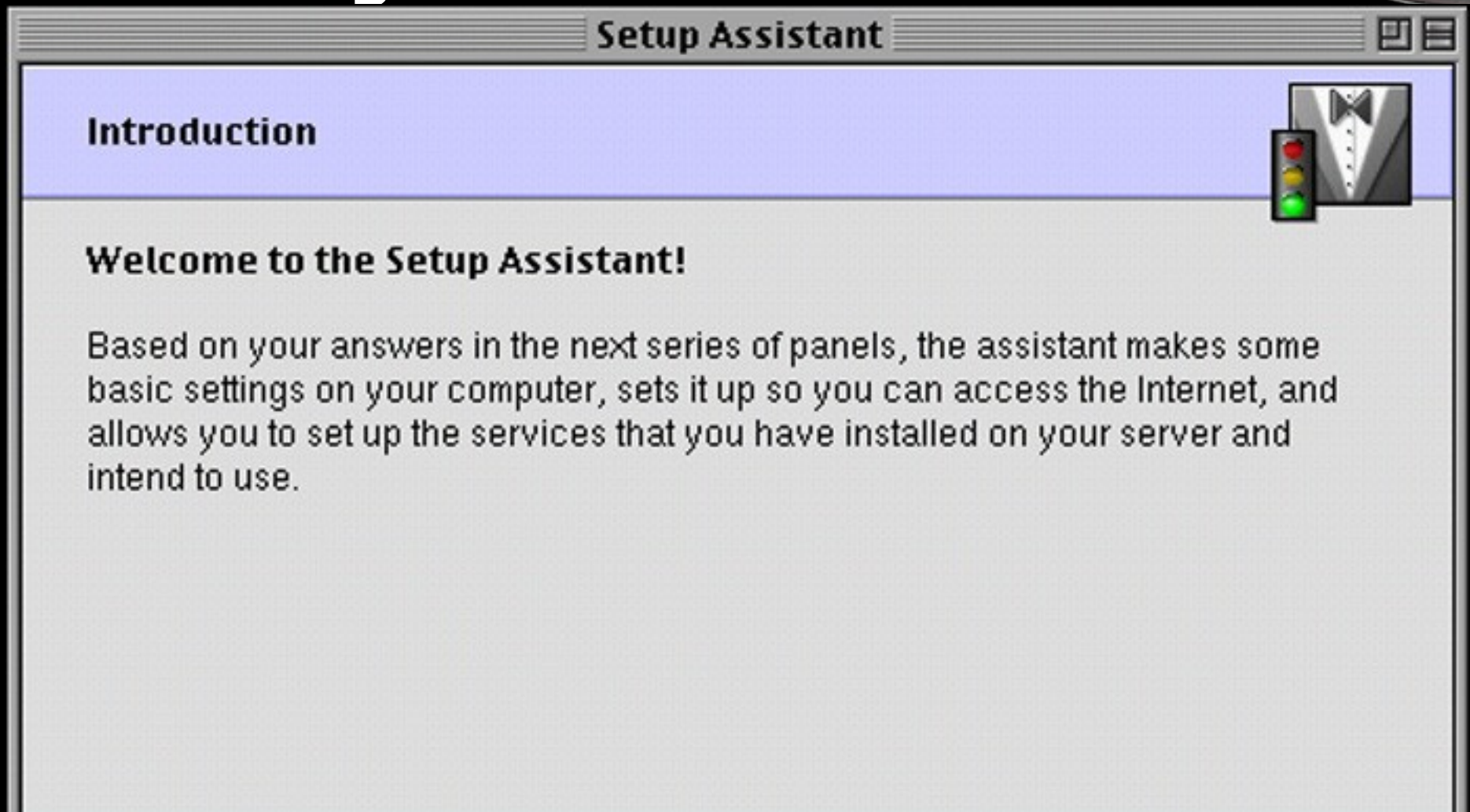From 0-to-serving when preinstalled on Power Macintosh Server G3

Under 30 Minutes

From 0-to-serving for a new installation on a Power Macintosh G3

Power Made Easy

Easy, Mac-like installation and setup

Setup Assistant

Introduction

Welcome to the Setup Assistant!

Based on your answers in the next series of panels, the assistant makes some basic settings on your computer, sets it up so you can access the Internet, and allows you to set up the services that you have installed on your server and intend to use.

Power Made Easy

Easy, Mac-like installation and setup

Setup Assistant

Ethernet Port Planning

In order to configure each of your Ethernet ports properly, information must be requested per port depending on how it will be used. This computer has 1 Ethernet ports. Check below to indicate how each port will be used.

Ethernet Port	TCP/IP	AppleTalk
Built-in Ethernet Port	☑	☑

Click the right arrow to continue.

Setup Assistant

Built-in Ethernet Port: IP Address

This port will need an IP address in order to access the Internet. You can assign an IP address manually or the computer can request an IP address from a server on this port's subnet.

How do you want to configure the IP address?

○ Request an IP address automatically at startup

◉ Assign an IP address manually

Port IP address: 17.203.34.194
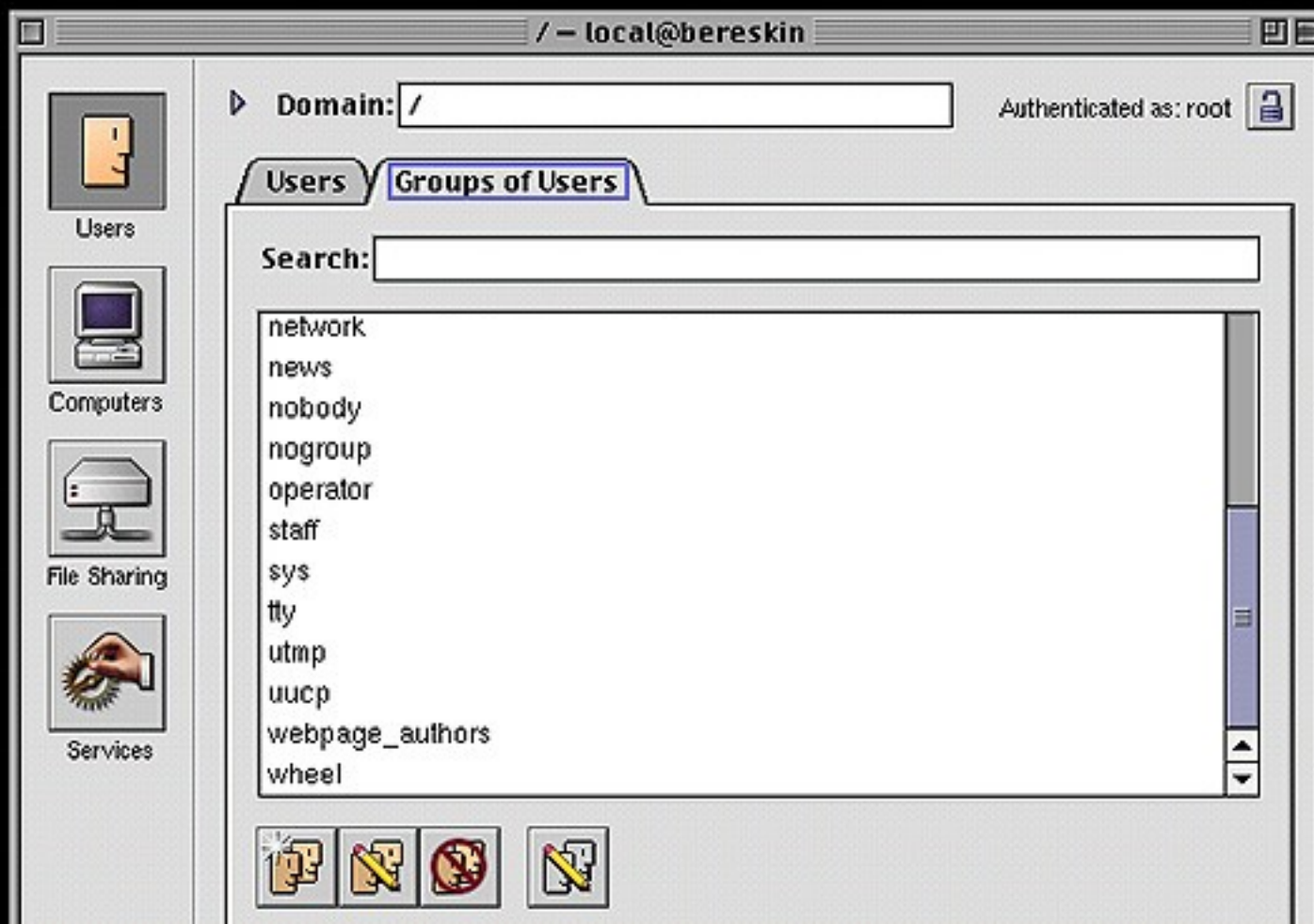
Subnet mask: 255.255.252.0

Power Made Easy

Remote and centralized administration

Users & groups shared across multiple servers

/ — local@bereskin

Domain: /   Authenticated as: root

Users | **Groups of Users**

Search:

- Users
- Computers
- File Sharing
- Services

```
network
news
nobody
nogroup
operator
staff
sys
tty
utmp
uucp
webpage_authors
wheel
```

Open Standards

Open Standards

Mac OS X Server delivers great functionality, tested and proven by the industry

- Mach 2.5
- BSD 4.4
- Java JDK 1.1.6

Interoperability

- Network protocols and interfaces
  - TCP/IP
  - AppleTalk

- File systems
  - Mac OS Format (HFS, HFS+)
  - Mac OS Server Format (UFS)
  - CD-ROMs (ISO 9660)
  - Sun's NFS, Apple's AFP

Application Services

APACHE

WebObjects

NetBoot

Apache

- The world's #1 HTTP web server
- Operating system optimized to deliver best-in-class performance
- Integrated for simple one-button setup
- Includes powerful administration tools

WebObjects 4

The Internet has changed the face of application development.

- The world's #1 application server
  - Powers the Apple Store, BBC News, the Hard Rock Café, and more

- Now runs on Macintosh

- Includes basic deployment license

- Bundled with WebObjects developer tools

NetBoot

Macintosh network management made simple

- Manage multiple Macintosh computers on a network as if they were a single system
  - Great solution for classrooms and labs
  - Ideal for data-entry and editorial workflows

- No setup required when adding new Mac systems
  - NetBoot support built into all iMac computers

- You can gain total control of the network

- Your Mac can be anywhere
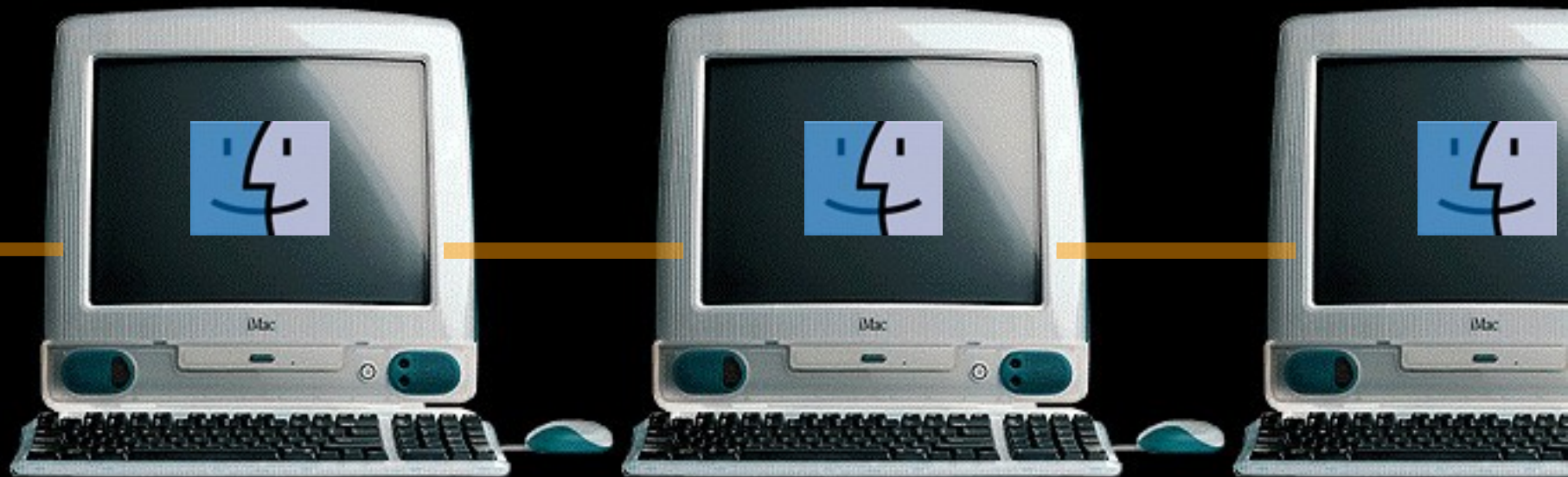
How It Works

It all starts with a powerful server

How It Works

Boot from a single shared System Folder

How It Works

Plug-and-play for an entire computer network

How It Works

Control access to network resources

How It Works
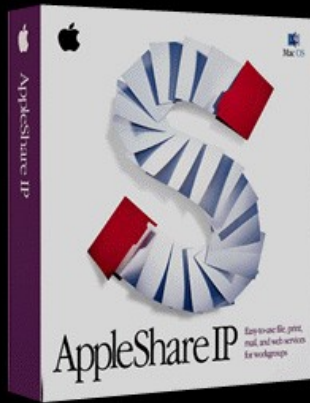
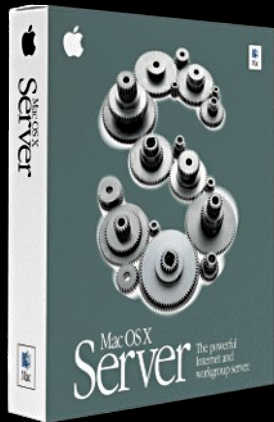Access your environment—anywhere!

Apple File Services

Enhance workgroup productivity with a scalable suite of network services

- Serves files to any AppleShare client over TCP/IP or AppleTalk networks

- Scales to over a thousand simultaneous users and thousands of open files

- Allows web-based remote administration

A Great Complement

- AppleShare IP
  The world's easiest-to-use general-purpose server

- Mac OS X Server
  Innovative services with greater scalability

Compelling Solution

Great Web Server

- Exceptional reliability and performance
  - Fastest Apache server in the world!
- Latest version of Apache fully integrated
- Wealth of tools from the UNIX community
  - FTP, Perl, Shell, and more
- WebObjects available for building and deploying dynamic network applications

Great Server for Education

- Classrooms

- Labs

- Distance learning

- Administration

Great Server for Publishing

- Many innovative third-party products under development
- OPI solutions
- Workflow solutions
- Asset management solutions

Great Third-Party Solutions

- HELIOS EtherShare
  - EtherShare, EtherShare OPI, PDF Handshake, Print Preview
- Canto Cumulus
  - Media asset management
- Xinet FullPress
  - WebNative, file sharing and OPI
- AvatarWorks Avatar
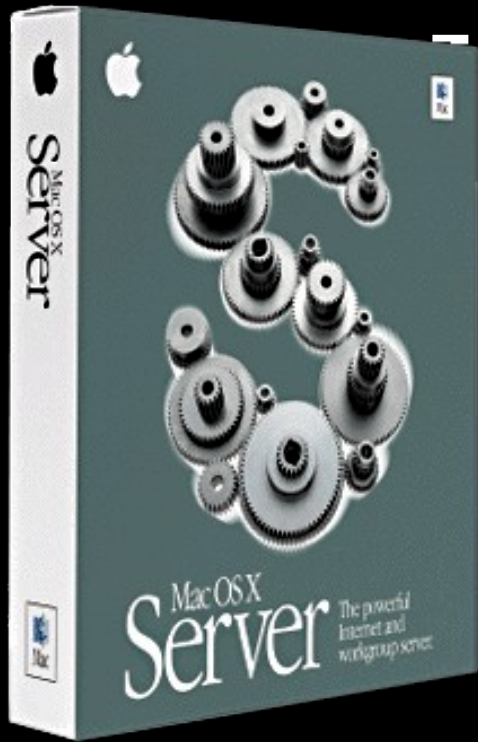 - Collaboration and groupware

Great Third-Party Solutions

- Sassafrass KeyServer
  - License management
- Stalker Software CommuniGate Pro
  - E-mail and messaging server
- Lundeen & Associates Web Crossing
  - Discussion services
- Running Start RSCommerce
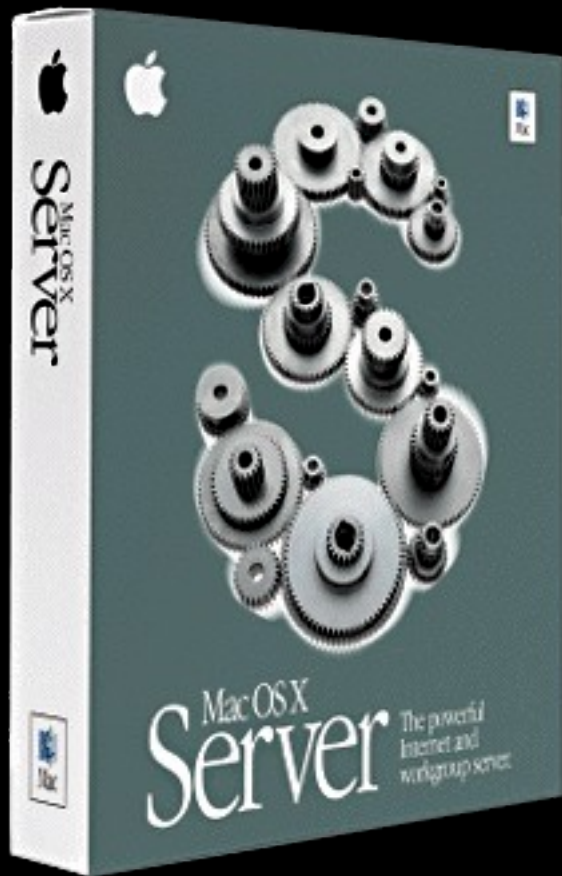 - Electronic commerce with WebObjects

Availability

Mac OS X Server

Available now!

- For any Power Macintosh G3 with at least 64MB RAM

- Unlimited client license for:
    Apache, NetBoot, Macintosh Manager, Apple file services

- WebObjects development and 50-tpm deployment license

- Estimated retail price: $499!

Macintosh Server G3

with Mac OS X Server

Available now!

- Based on new Power Macintosh G3 architecture with faster processors, memory, disk I/O and system bus

- Unlimited-client license for NetBoot, Macintosh Manager, and Apple file services

- Software preinstalled for easy setup and configuration

- Estimated retail price: $4,999 with 90 days free installation support

Macintosh Server G3 with Mac OS X Server

- 400MHz PowerPC G3 with 1MB cache

- 256MB SDRAM (expandable to 1GB)

- Two 9GB 10,000-rpm Ultra2 LVD SCSI hard disks   with single-channel Ultra2 LVD SCSI card

- 24x-speed (maximum) CD-ROM drive

- Built-in 10/100BASE-T Ethernet and 4-port 10/100BASE-T Ethernet card

- Mac OS X Server CD, WebObjects

BTO Options

Macintosh Server G3 with Mac OS X Server

PowerPC G3 Processor

400 MHz

Memory

256MB
384MB
512MB
768MB
1GB

Hard Disk

Two 9GB 10,000-rpm Ultra2 LVD SCSI
Three 9GB 10,000-rpm Ultra2 LVD SCSI
Two 18GB 10,000-rpm Ultra2 LVD SCSI*
Three 18GB 10,000-rpm Ultra2 LVD SCSI*
One 36GB 7200-rpm Ultra2 LVD SCSI
Two 36GB 7200-rpm Ultra2 LVD SCSI
Three 36GB 7,200-rpm Ultra2 LVD SCSI

Other

Gigabit Ethernet
Dual-Channel Ultra2 LVD SCSI Card
Ultra SCSI Card
LaCie External DDS-3 Tape Drive

* May not be available immediately at introduction

Q&A