



Mac OS

X

Server

Name

Title here

Apple Computer, Inc.



# Mac OS X Server

# Apple Servers

Extend and support our desktop platform

- Connect Users  
Email, File Sharing, Networking
- Deliver Content  
Web, Print, Digital
- Simplify Administration  
Configuration, Total Cost of Ownership

# Mac OS X

First in a new line of server software from Apple

# 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 Role of Solid and fast!



# Rock Solid

Operating system based on Mach 2.5

- 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

Find:  Show: All Processes

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

76 processes. Sample every  seconds

Less Info

Process ID Statistics Path & Arguments

Total CPU Time: 0:00  
Virtual Memory Size: 4.20M



# Fast

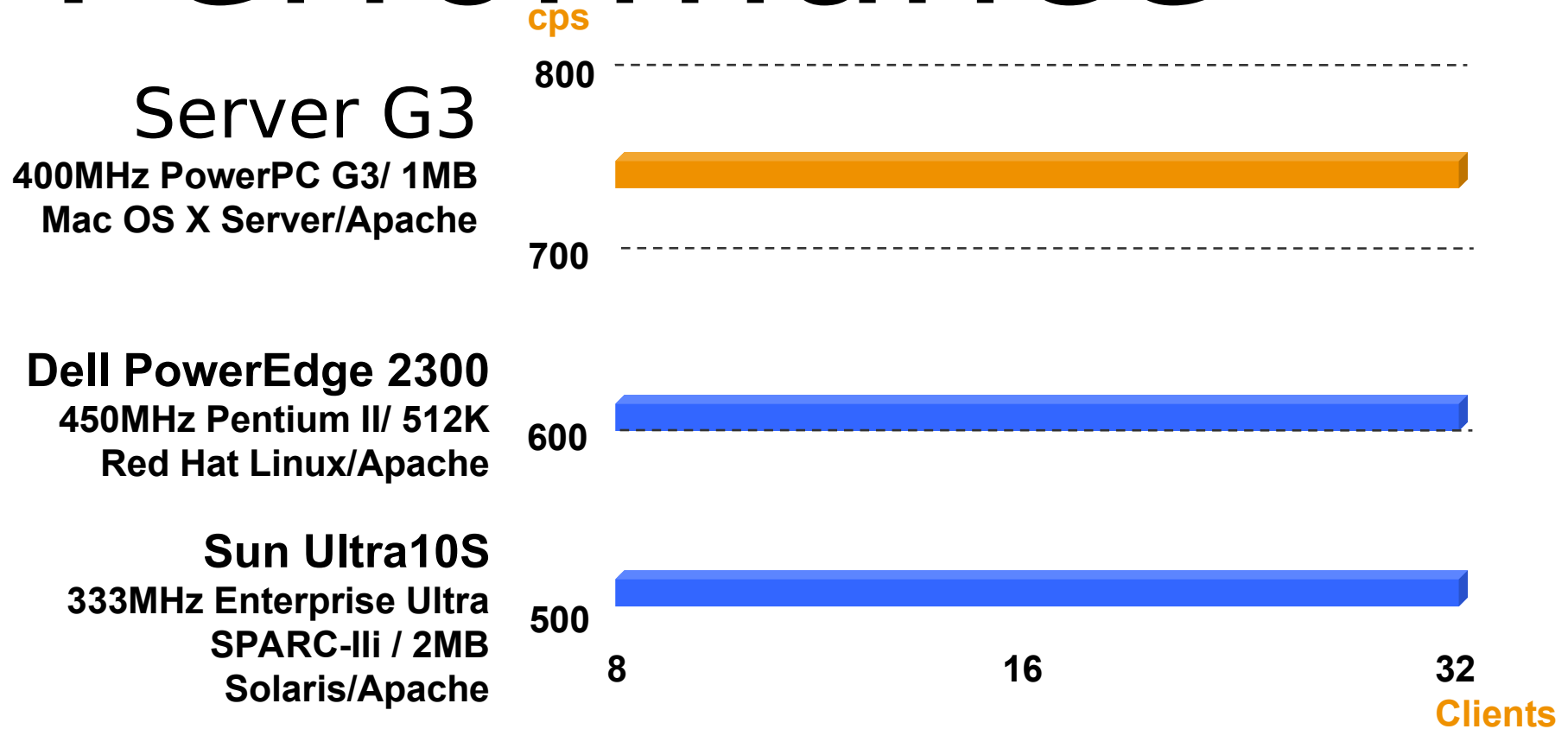
**Modern architecture, fully PowerPC native**

- 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!



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

# Network Performance

More than twice as fast as NT Server

One Large File  
(100MB)

**New Mac  
Server G3**



78 Mbps

**NT Server**  
450 MHz



34 Mbps

Folder of 100 files  
(1MB each)

**New Mac  
Server G3**



62 Mbps

**NT Server**  
450 MHz

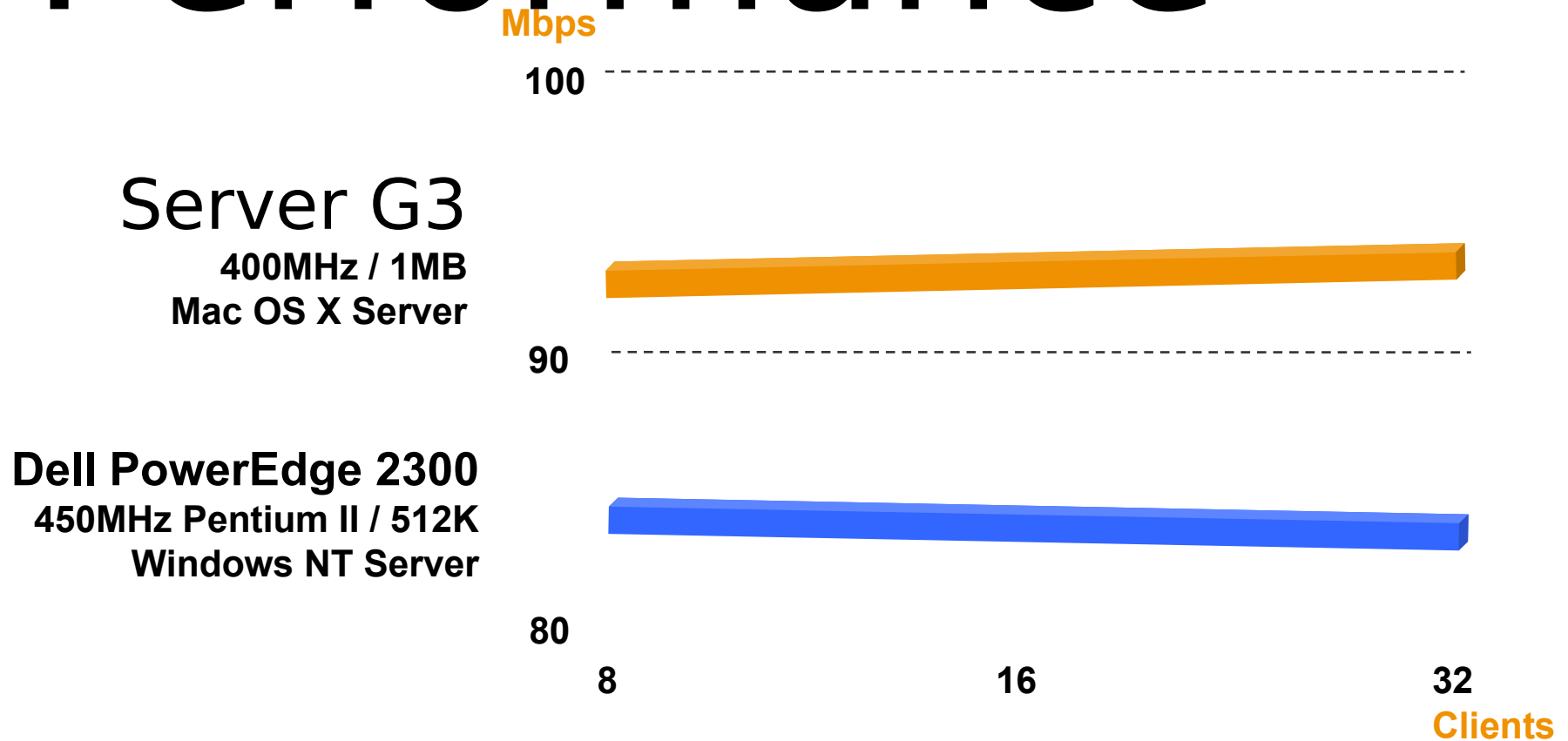


30 Mbps

File copies from Power Macintosh G3/300 client to Server G3 and NT Server

# Network Performance

Outperforms Windows NT Server!



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, Mac-like installation and setup

# Easy

## 5 Minutes

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

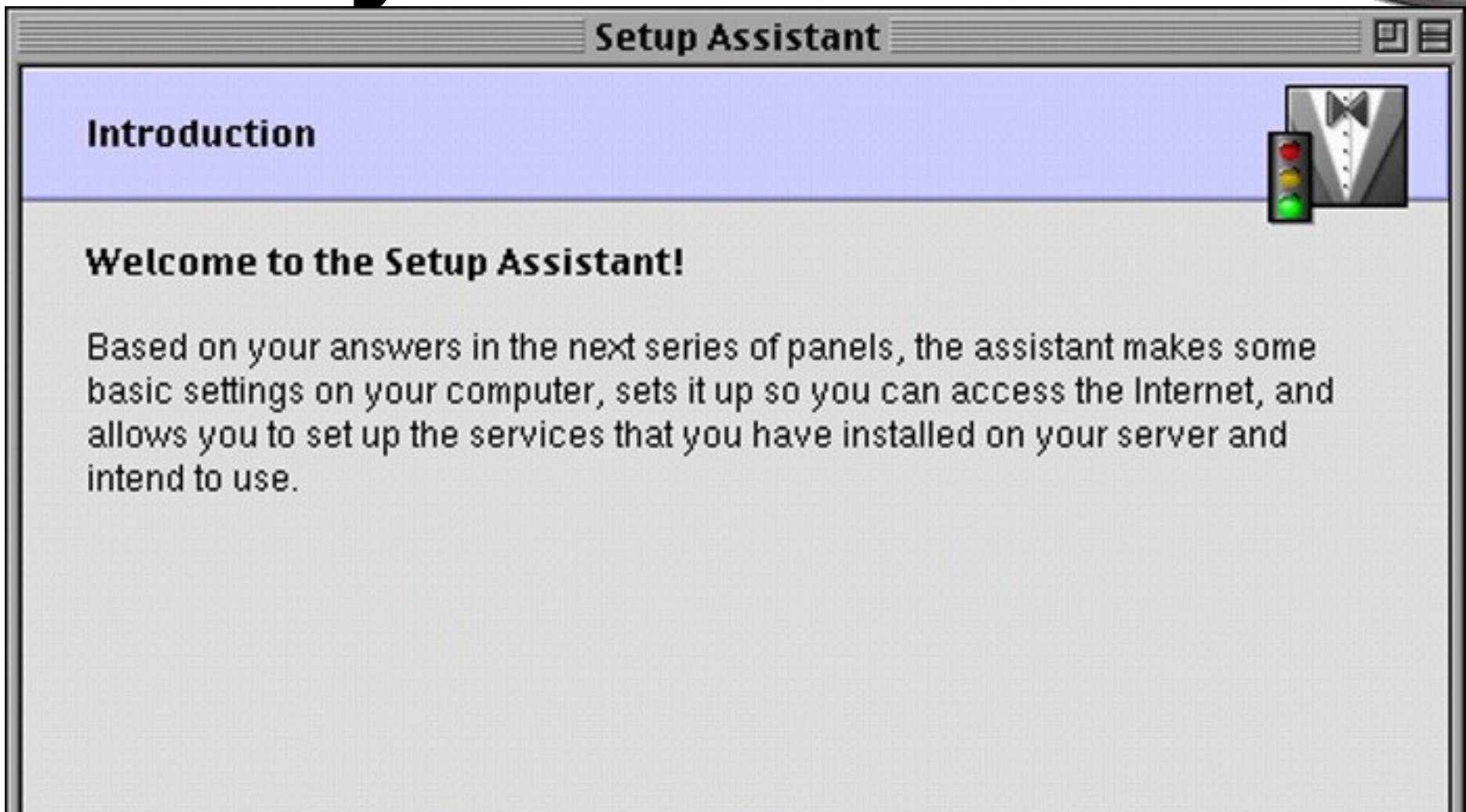
## Under 30 Minutes

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



# Power Made Easy

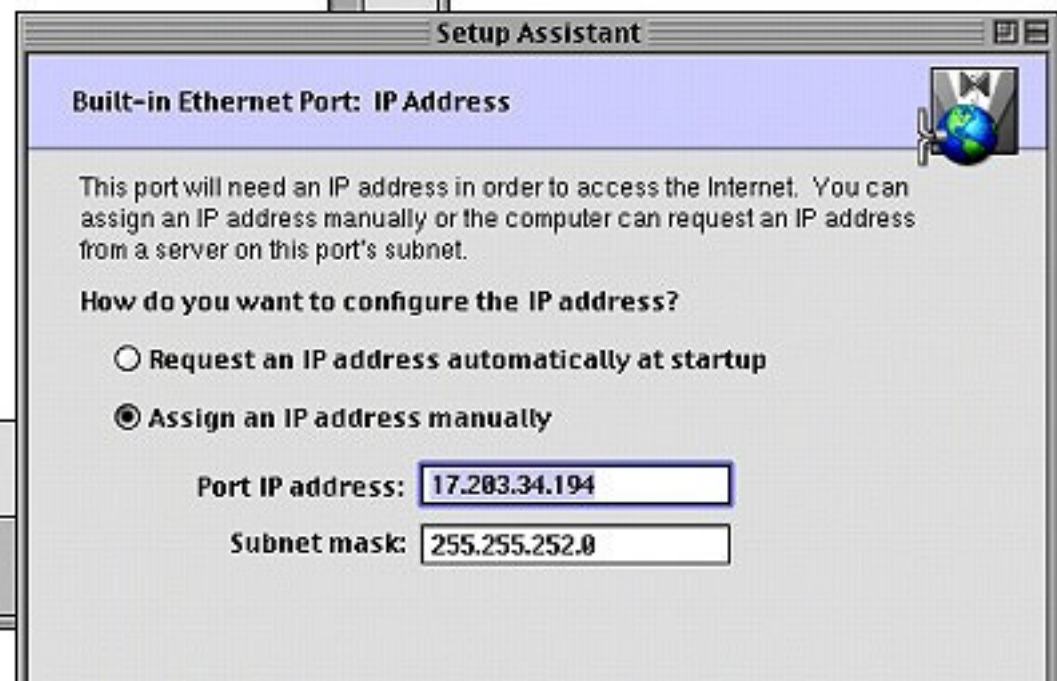
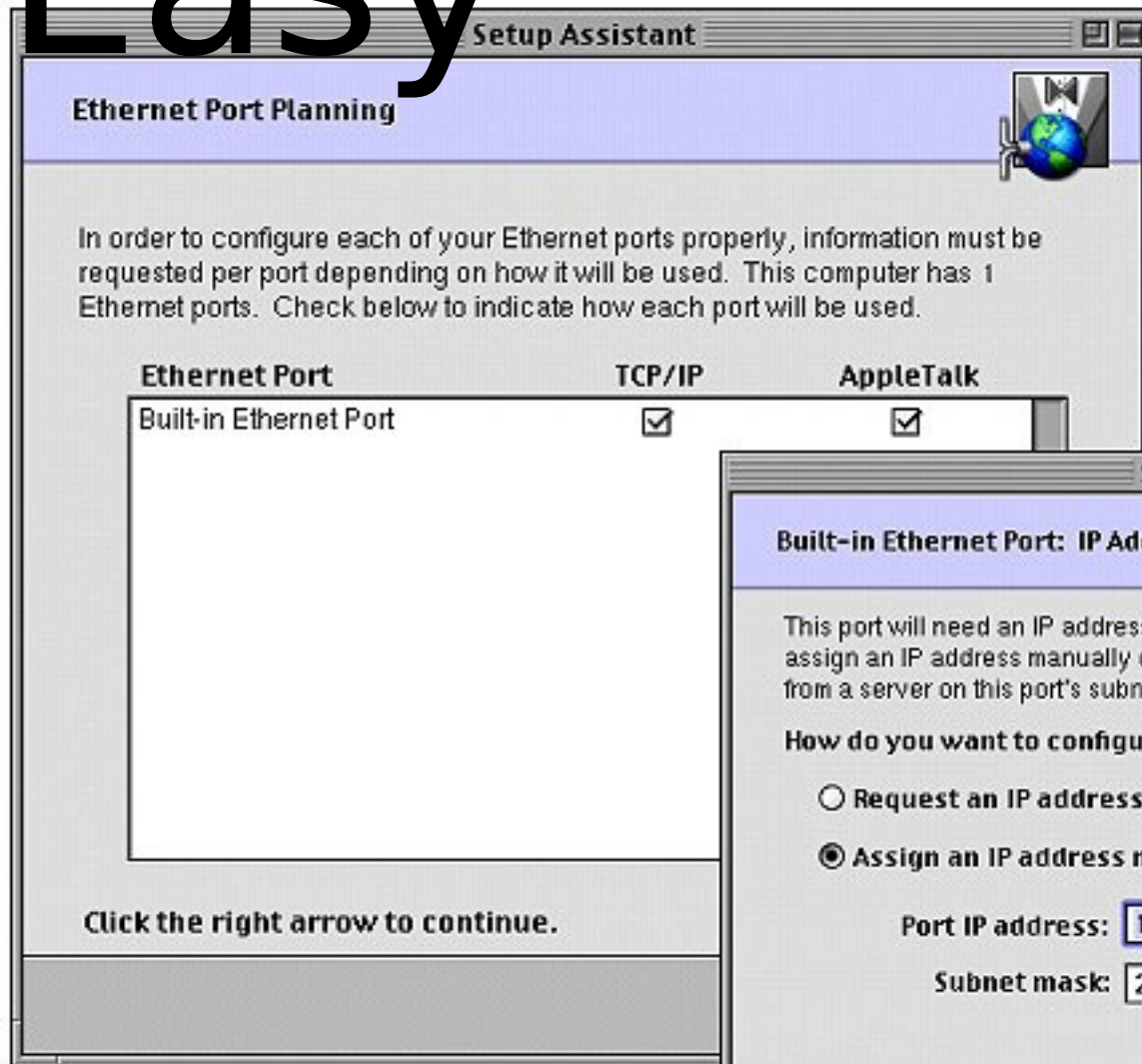
Easy, Mac-like installation and setup



# Power Made

Easy, Mac-like installation and setup

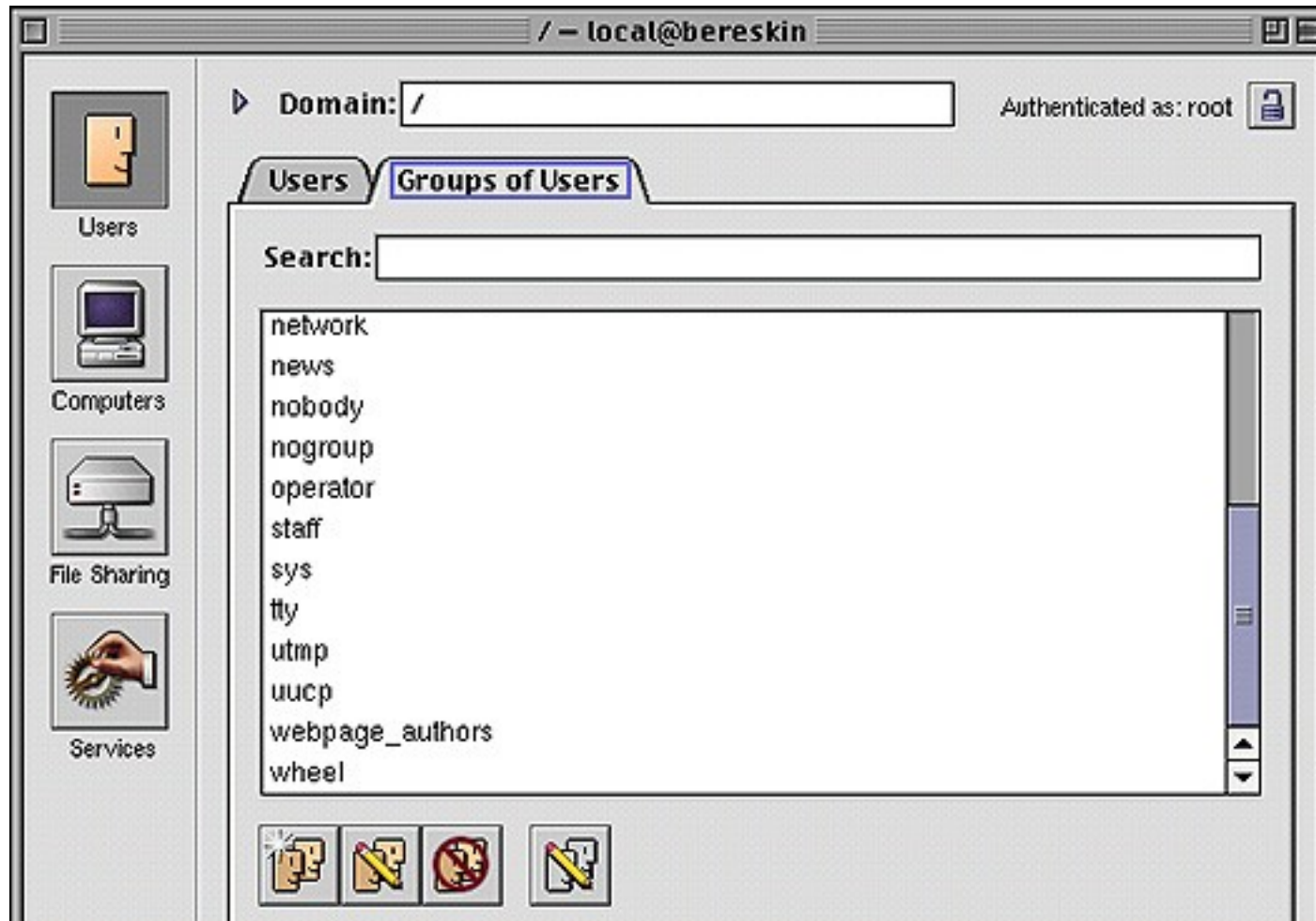
# Easy



# Power Made

Remote and centralized administration

Easy  
Users & groups shared across multiple servers





Open  
Standard  
s

# 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 intera
  - 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

- 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

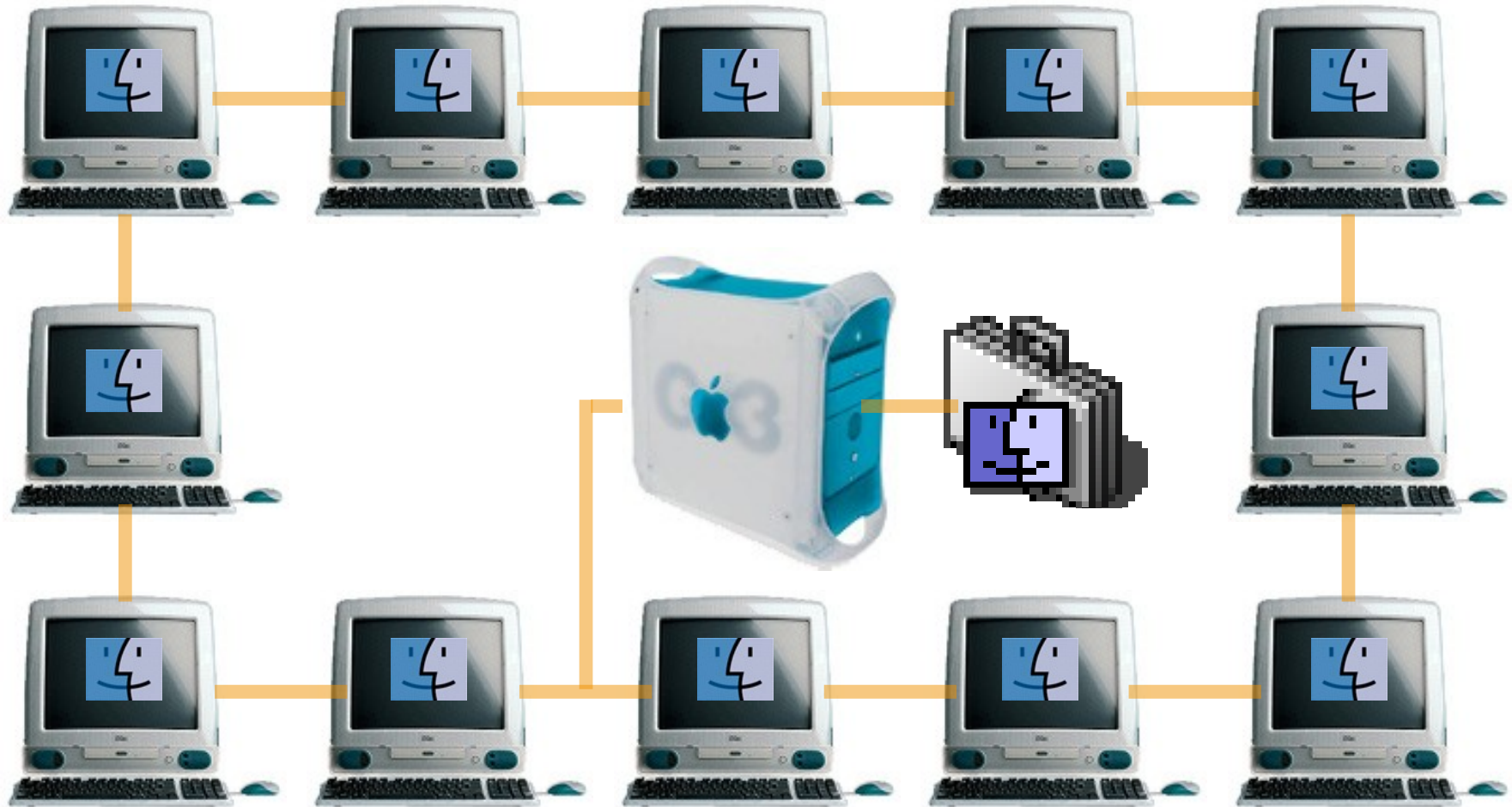
It all starts with a powerful server





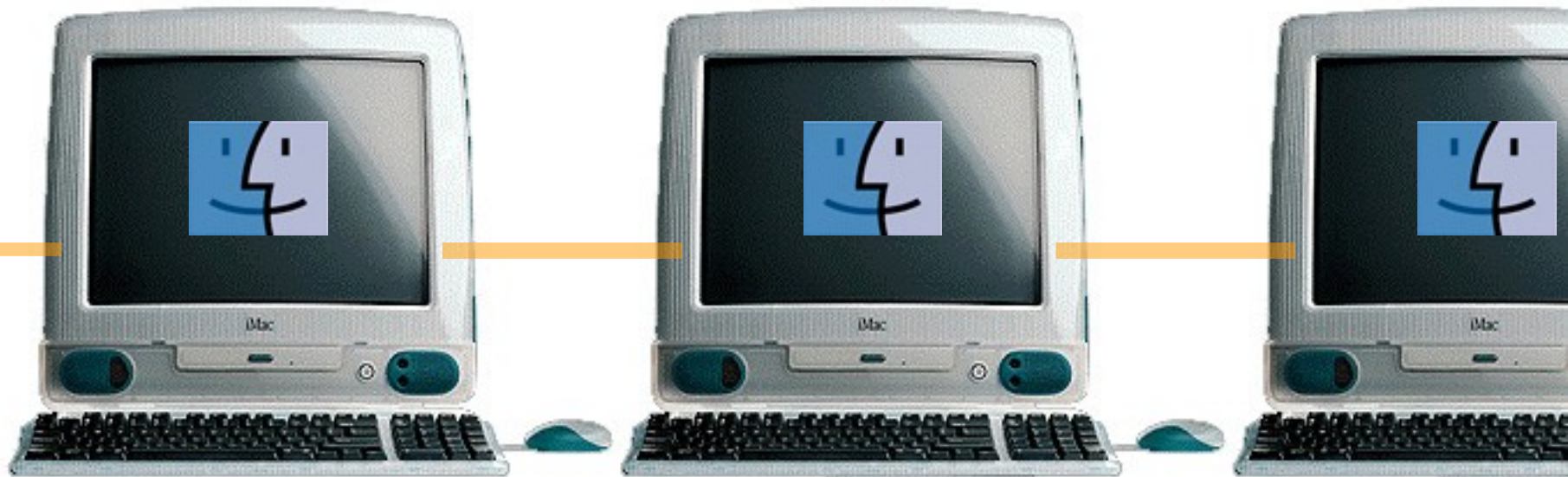
# How It Works

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!



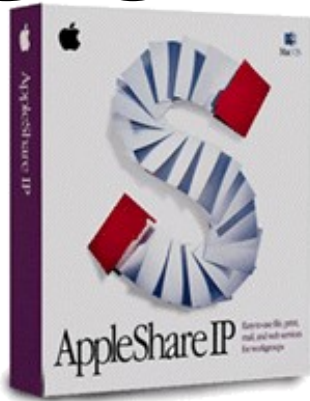
# Apple File

Enhance workgroup productivity with  
a scalable suite of network services

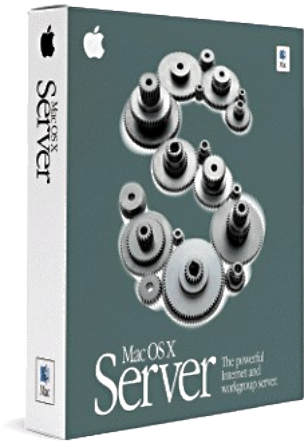


- Serves files to any AppleShare client over TCP/IP or AppleTalk networks
- Scales to over a thousand simultaneous users and thousands of open files
- Allows web-based remote administration

# A Great Servers for every need Complement



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



- Mac OS X Server  
Innovative services with greater scalability

Compelli  
ng  
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 for Publishing

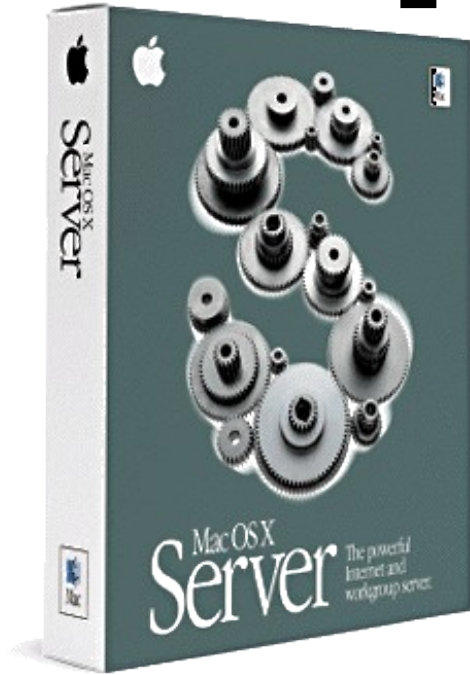
- HELIOS EtherShare
  - EtherShare, EtherShare OPI, PDF Handshake, Print Preview
- Canto Cumulus
  - Media asset management
- Xinet FullPress
  - WebNative, file sharing and OPI
- AvatarWorks Avatar
  - Collaboration and groupware

# Great Third-Party Solutions

Solutions for Networking and the Internet

- 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

# Availabil

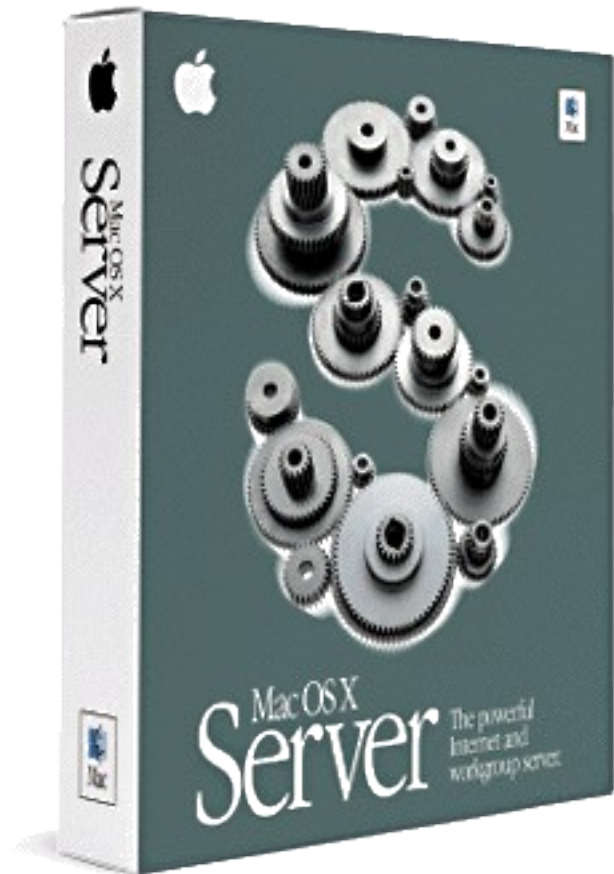


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# Mac OS X Server

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

• 400MHz PowerPC G3 with 1MB cache  
with Mac OS X Server

- 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 Memory

### Hard Disk

### Other

### G3 Processor

400 MHz

256MB	One 9GB 10,000-rpm Ultra2 LVD SCSI	Gigabit Ethernet
384MB	One 9GB 10,000-rpm Ultra2 LVD SCSI	Dual-Channel Ultra2 LVD SCSI* Card
512MB	One 18GB 10,000-rpm Ultra2 LVD SCSI	Ultra SCSI Card
768MB	One 18GB 10,000-rpm Ultra2 LVD SCSI	Ultra SCSI Card
1GB	One 36GB 7200-rpm Ultra2 LVD SCSI	Ultra SCSI Card
	Two 36GB 7200-rpm Ultra2 LVD SCSI	Ultra SCSI Card
	Three 36GB 7,200-rpm Ultra2 LVD SCSI	Ultra SCSI Card

\* May not be available immediately at introduction

**Q & A**



Think different.