Internet Access by Platform

- Windows 61%
- Macintosh 21%
- Unix 9%
- DOS 5%
- Other 4%

Versus 8.7% Overall Share

http://www.mirai.com
The Open Internet Platform

Apple will work with any vendor that is committed to open Internet standards

Mac OS App  Multi-client applications  Win 32, Unix...

QuickTime Media Layer  Internet Platform  Embrace Key Internet Standards

Mac OS  Other Platforms
Apple and the Internet

- Capitalizing on our core strengths
  - Ease of use
  - Media rich content
Top IS Objectives

- Align IS and corporate goals: flexibility
- User access to cross-functional data
- Move legacy systems to new architectures
- Connect to customers and suppliers
- React to rapid shifts in technology

Source: 1996 Computer Sciences Corporation survey
Apple Internet Value Chain

Content

Access
- AICK
- Cyberdog

Deliver
- AISS
- Network Servers

Create
- Media tools
- Web Publishing

Platform
- TCP/IP and Open Transport
- Java everywhere
- OpenDoc and OpenDoc plug-in architecture
- QuickTime media layer
Apple Internet Value Chain

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Internet Platform Technologies

- An open standards approach
  - TCP/IP
  - HTTP
  - Java
  - OpenDoc
  - QuickTime media layer
  - HotSauce MCF
TCP/IP and Apple

- The future of Apple networking is TCP/IP
- Open Transport made TCP/IP a peer protocol with AppleTalk
- TCP/IP across all client platforms:
  - Macintosh
  - Pippin
  - Newton
- Open Transport 1.1.1 and ARA 3.0
TCP/IP and Apple

- **OT/PPP**
  - IP over PPP
  - Beta available on the web
  - Final and posted on web by Dec. 1

- **FutureShare**
  - Supports FTP, POP3/SMTP, AFP, AFP over IP
  - Beta in November/December
  - FCS by mid-February
Java Everywhere

- MacOS Runtime (VM) pre-released
  - available on the web: www.devtools.apple.com/mrj

- Driving it onto all of our platforms

- Integration with OpenDoc and QuickTime media layer

- Performance and reliability are key
OpenDoc

- Apple integrating Internet into Mac OS via OpenDoc

- Recent developer commitments include:
  - Digital Harbor Wave container
  - Corel WordPerfect container

- OpenDoc plug-in architecture supports:
  - Netscape plug-ins
  - Java applets
  - OpenDoc parts
  - Other component architectures...

- IBM Windows beta available on the web
QuickTime Media Layer

- QuickTime for the Internet—release 2.5
  FastStart, MPEG, MIDI
  Music Architecture
  Mac OS and Windows feature parity

- QuickTime Conferencing—backbone for QT Live events and collaboration

- QuickTime VR—de facto standard, under consideration for VRML

- QuickDraw 3D—part of VRML 2.0
HotSauce™ Meta Content Format

- An open standard for representing information “about” content
- Can describe the content of:
  - Web sites: Hierarchies of linked pages
  - Gopher/FTP sites: Hierarchies of "folders"
  - E-mail: Date, To, Subject, … fields
  - Catalogs: Merchants and Vendors
  - Databases: Hierarchical and Relational
- Platform/application independent
Why HotSauce MCF?

- HTML is good for describing pages, but loses information when structured content is rendered.
- MCF is a standard for describing how and where information is stored in structured content sources.
- No other general metadata format has been proposed and accepted as a standard.
What MCF provides:

• Lets you use any MCF-savvy view/query tool to access and integrate information from multiple sources:
  - Local disk
  - LAN
  - Intranet
  - Internet

• As long as the content is described in MCF
HotSauce fly-through plug-in

- Big picture of a web site
- Works with all popular web browsers
- Mac OS and Win32 compatible
- Alternate views available
  - Outline view (Finder-like)
  - Hyperbolic view (XSoft)
Benefits of MCF

- Easier access to information and information relationships
- Open standards-based platform leverages development investment
- Faster / easier integration with MCF data outside corporate firewall
Apple Internet Value Chain

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Internet Client Access

- **Apple Internet Connection Kit (AICK)**
  - Best of class Internet application bundle
  - Apple Guide lowers support costs

- **Cyberdog**
  - Component software internet application “suite”
  - Enables custom IS solutions

- Apple will continue to develop and support both products
Cyberdog 1.2

- Improved user interface
- Runs on PPC and 68K Macs
- AppleTalk network browsing
- Netscape plug-in support
- WorldScript (double byte) aware
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Internet Delivery: Servers

- Apple Internet servers scale from the workgroup to the enterprise

- Apple Internet Server Solution (AISS)
  - Mac OS based
  - Easy to setup and administer
  - Complete web server solution
  - 100,000s of hits per day

- Network Server 500 and 700
  - AIX based
  - Value added server hardware
  - Faster real time processing
  - 1,000,000s of hits per day
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IS Goes Hollywood?

IS intends to implement multimedia applications

- Interactive Training
- Customer Self Service
- Publishing
- Video Production
- Sales, Service, Support
- Marketing Support
- Other

Source: Gartner Group
WWW Graphics Design

Macintosh 40.9%
Unix 25.3%
Windows 28.4%
Other 5.4%

http://www.mirai.com
Internet Video Content

QuickTime 53.6%
MPEG 34.1%
AVI 12.3%

Source: Internet Multimedia Technology Survey
Internet Video Content

QuickTime 2.5 Accessible 87.7%

AVI 12.3%

Source: Internet Multimedia Technology Survey
Internet Content Tools: Create

- Extend leadership positions in publishing and media authoring to the Internet
- Work with developers to deliver:
  - Media content creation tools
  - Electronic publishing tools
  - Web authoring tools
  - Dynamic web page tools
  - Innovative Java development tools
Summary

- Apple is committed to embracing open Internet standards
- Apple is contributing QuickTime and MCF to the Internet community
- OpenDoc component architecture integrates Multimedia and Internet everywhere
- Apple will make the Internet as easy to use as the Macintosh