

The background of the image is a collage of various items: a magnifying glass with an Apple logo on its handle, a green pen holder with several pens, a globe, and some papers. The text is overlaid on this background.

Worldwide

Developers

Conference



Rhapsody User Experience

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The Rhapsody Look and Feel

The best of all worlds

- Much like Mac OS look and feel
- New ideas from OpenStep
- A few ideas from other platforms



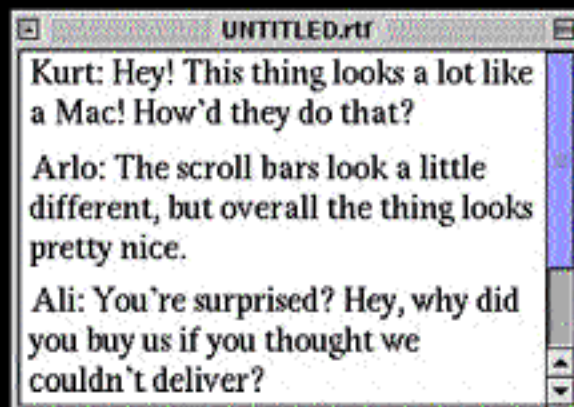


**Rhapsody
Windows, Menus,
Controls**

Demo

Key Points

- **Scrolling much improved**
 - Live scroll, proportional thumbs
- **Mac menu bars, with additions**
 - Tear-offs, context menus
- **Window behavior improved**
 - Layers
 - Resize
 - Live drag





Rhapsody Finder

No demo

Rhapsody Finder Features

Mostly, the Mac OS Finder

- **Multiple windows**
- **Drag to the desktop**
- **Icon view**
 - Pixel level positioning
 - 32x32 icons
- **List view**
 - Twisty triangles
 - Resizable, reorderable columns



Rhapsody Finder Features

An OpenStep style browser

- **Browsers are cool too**
- **Much like today's OpenStep browser**
 - Multiple panes
 - Shelf
 - Path
- **Available as a menu item**



Rhapsody Finder Features

Extensible and replaceable

- **Why settle for Apple's browsers?**
- **You can write plug-ins**
 - No current schedule for a specification
 - Feature in Unified release
- **Viewers will be separate applications**
 - Not for just the file system anymore



Finder for Developer and Premier Releases

- **For Developer**
 - Small delta from OpenStep Workspace
- **For Premier**
 - Incremental changes
- **Unified**
 - The full, extensible experience





Other Experience Elements

A grab bag

File Types and Creators

Type and Creator

Extension

- **We will preserve this experience**
 - Files will have the equivalent of types and creators, but some file systems simply can't support this
- **File extensions (.txt, .html) will be a fall back position**
 - Better than Mac OS experience, though
- **Limited support in Premier; full by Unified**



Help System

- **HTML Based**
 - Build with relative references
 - Links to Internet based help, other sources
- **Powerful navigation**
 - Link or search
- **Incremental approach to task-based help**
 - Layered on HTML
- **Basic system in place by Premier**



Internet/Intranet Integration

- **Integrated with Rhapsody Finder architecture**
 - Extensible and replaceable
 - Desktop URLs, etc.
- **Includes Internet, intranet, and LAN**
- **Internet data types as first class citizens**
 - Text object handles HTML
- **First instances by Premier**



Installation

- Rhapsody has its own SDK and installer
- Rhapsody has built-in uninstall
- Upgrader capability as well





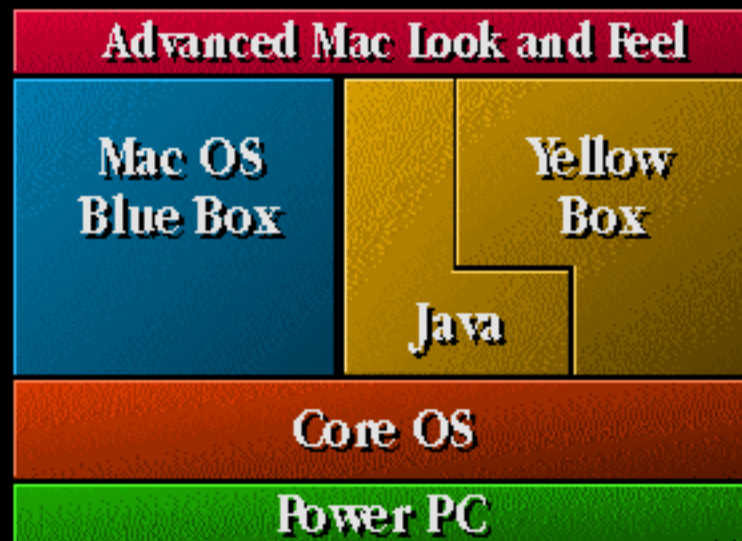
Mac OS Integration

The hard part

The Big Picture

There's two computers in there

- Mac OS and Rhapsody almost completely separate
- We've argued about this
 - We think there is no ideal solution
 - We made the tough call



Why Separate the Environments?

Rule #1

**Avoid
Hidden Modes!**

- If you can't provide seamless integration
- Make the mode switch obvious



Basic Rules for Integration

- Don't change modes unexpectedly
- Don't hide differences that make a difference
- Don't make the user guess what changed



Shared System Elements

- **Shared**
 - The file system (partial)
 - The clipboard
 - The screen (partial)
 - The fonts
- **Not shared**
 - The Finder



The File System

- **Mac OS sees a series of volumes: shared, disk image, partitions**
- **Shared**
 - Each side can see all files in shared directories
 - Tend to hide inappropriate files
 - Separate directories for the different environments
 - Other directories made less obvious



The File System (*cont.*)

- **Special compatibility modes for Mac OS**
 - **Mac OS partitions, disk images**
 - Files not shared with Rhapsody in general
 - More compatible with direct SCSI manager calls, disk utilities, etc.
 - **A setup panel will let users choose how to share file systems**



Screen Sharing

Two modes

- **Mac OS takes over screen**
 - Hot key switching
 - Rhapsody entry appears on process menu
 - Switching is never a “side effect”
 - Fastest, most compatible mode
- **Mac OS “in a box”**
 - Box is a Rhapsody window
 - Dragging stops at box boundary



Other Shared Elements

As few as possible

- **Still some important ones**
 - System time
 - Fonts
 - Clipboard



Two Finders

One in each environment

- **The only way to get both compatibility and stability**
 - Many applications, extensions, and scripts depend on Mac OS Finder
 - Mac OS Finder vulnerable to other program's mistakes
- **Two Finders reinforces separated model**
 - Separate icons depending on which Finder sees item



The Network

- Each environment presents its own view
 - Not all network protocols there on each side
 - Rhapsody won't have a Chooser



Summary

- **New advanced look and feel for Rhapsody**
 - Best of all worlds
 - Stable, extensible, high performance
- **Mac OS compatibility**
 - Highly compatible
 - Distinctly separate





Q&A

The background features a dark, textured surface with a glowing blue and purple sphere in the center. The sphere has a white Apple logo on its top. A magnifying glass is positioned over the sphere, and a pen is visible on the right side. The text "Worldwide Developers Conference" is overlaid on the image. The word "Worldwide" is in a gold, serif font. The word "Developers" is in a white, serif font and is enclosed in a white rectangular border. The word "Conference" is in a gold, serif font.

Worldwide

Developers

Conference