

Internet PDC

**Paul Maritz
Group Vice President
Platforms Group
Microsoft Corporation**

The “PDC” Phenomenon

- June 1991 - Windows 3.1
- July 1992 - Win32: Windows NT
- December 1993 - Win32: Windows 95
- January 1995 - Microsoft BackOffice
- March 1996 - The Internet

Computer Revolutions

**The PC revolution:
Cheap processors +
MS-DOS +
Spreadsheets**

**The Internet
revolution:
Cheap Connectivity
+ TCP/IP + Web**

Successful Revolutions Evolve

The PC revolution:

Standalone apps

S/W components

More graphical

Client/server apps

Multimedia/3D

Conferencing

Distributed
Computing
and Rich
Multimedia

The Internet revolution:

Static pages

S/W components

More graphical

Client/server apps

Multimedia/3D

Conferencing

Distributed
Computing
and Rich
Multimedia

One World:

**The PC
revolution:**

Standalone apps

**The Internet
revolution:**

Static pages



Conferencing

Multimedia/3D

Client/server apps

S/W components

GUI

Converging: The “Active Wave”

Best of the PC *plus* best of the Web

**The PC
revolution:**

Standalone apps

**The Internet
revolution:**

Static pages

**Interactive
distributed
applications:**
Common paradigm
for client/server
computing

Interactive multimedia:
Richer communications
between *people*

How Will Microsoft Contribute?

- Bring best of PC and the Web together in an open way:
 - For the developer
 - For the user
 - For the Intranet
 - For the Website
- Grow the market: new users for PC and Web

Microsoft And The Internet

■ We realize that things have changed!

■ The Web is the initial key application of the communications revolution (not Interactive TV, etc.)

■ Things will happen more quickly

■ It is not just about Windows, other platforms are important

Renewed Focus

New organization:

 *Desktop and Business Systems - Jim Allchin*

 Windows - client and server

 BackOffice

 *Internet Platform and Tools - Brad Silverberg*

 Browser, Shell, Multimedia

 Tools

 Commerce Services

 *Consumer Platforms - Craig Mundie*

 Non-PC (handheld, settop, etc)

 Solutions for network operators

Embracing And Extending

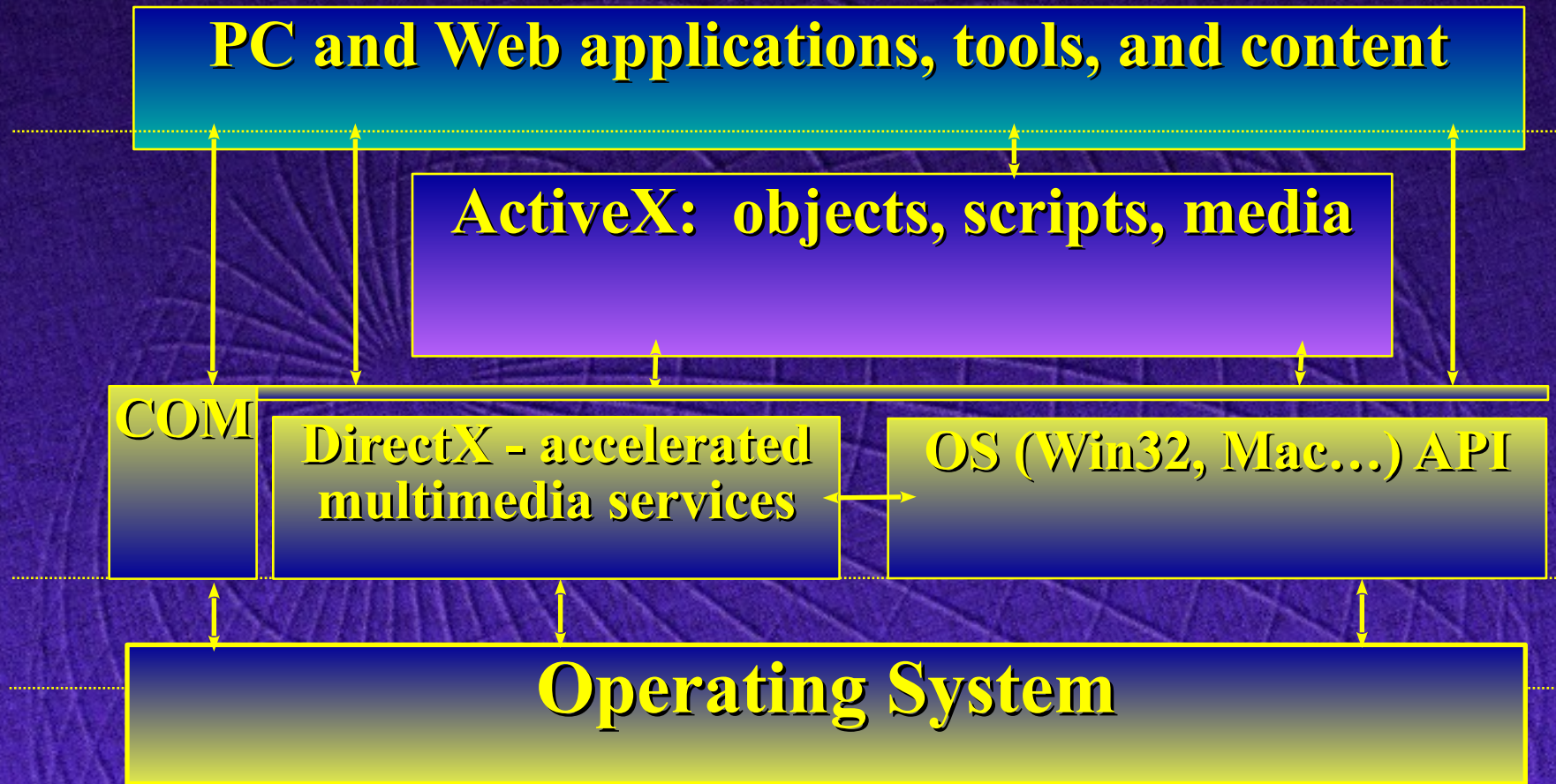
 **For the developer**

 **For the user**

 **For the Intranet**

 **For the Website**

The “Active Wave”: ActiveX™

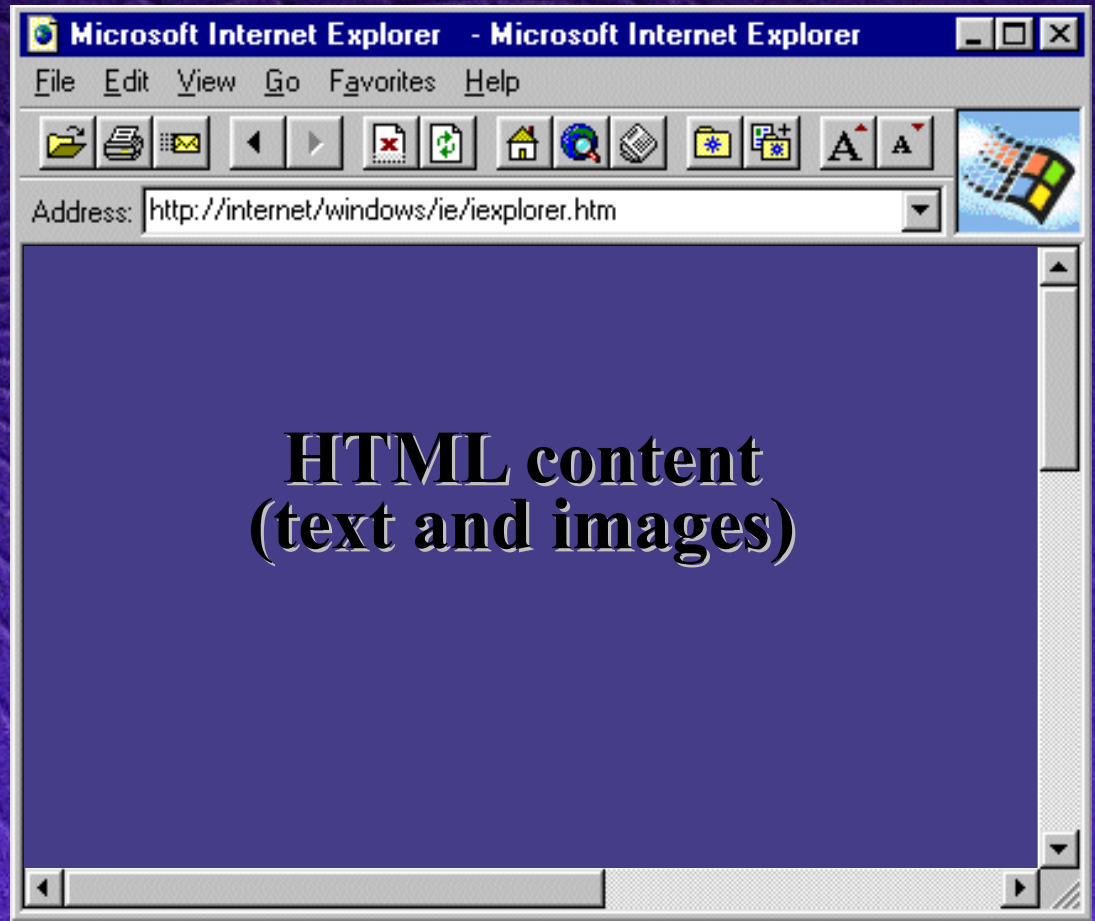


- Works for Internet and PC apps
- Leverage existing investment

- Open, extensible
- Cross-platform
- Language neutral

ActiveX Client

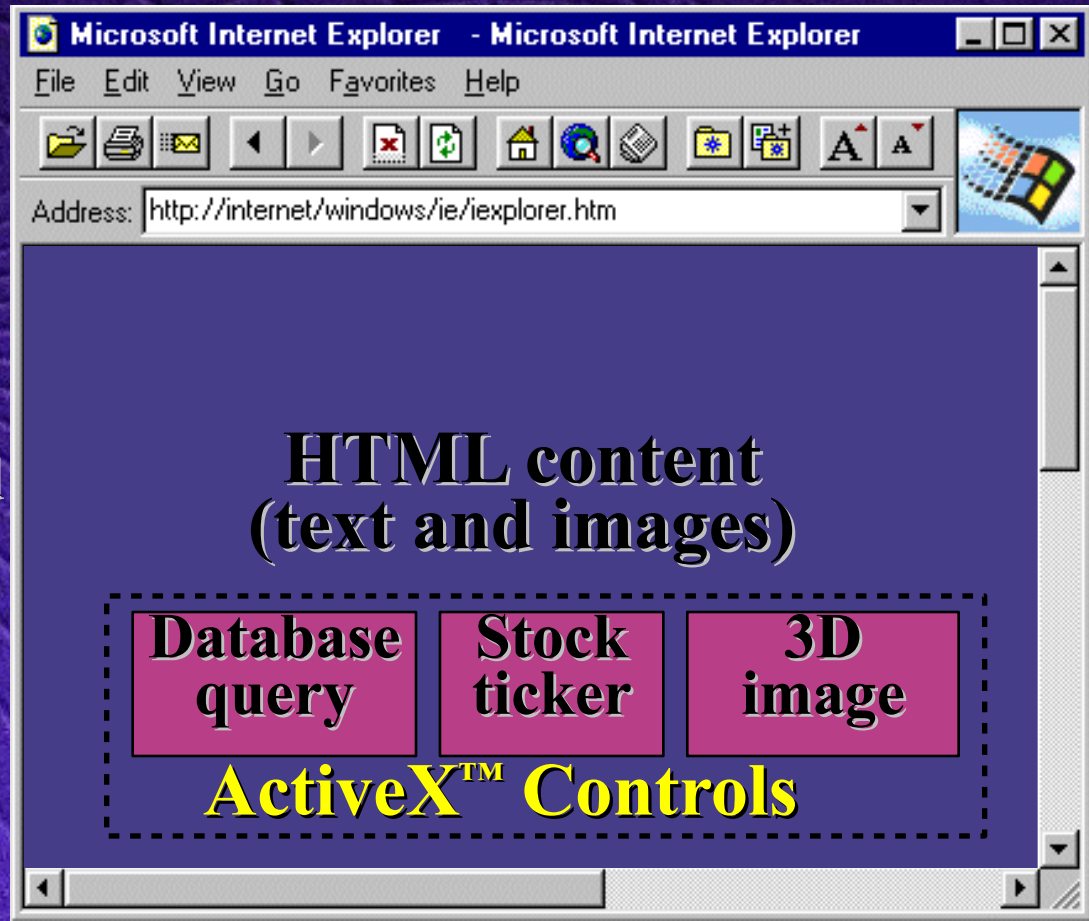
“Static Web pages”



ActiveX Controls

Internet Explorer 3.0

- Language independent
- Cross-platform
- Lightweight, fast
- Upward compatible with OLE controls
- Use in HTML pages and PC apps
- Broad tools support



ActiveX Scripting

Internet Explorer 3.0

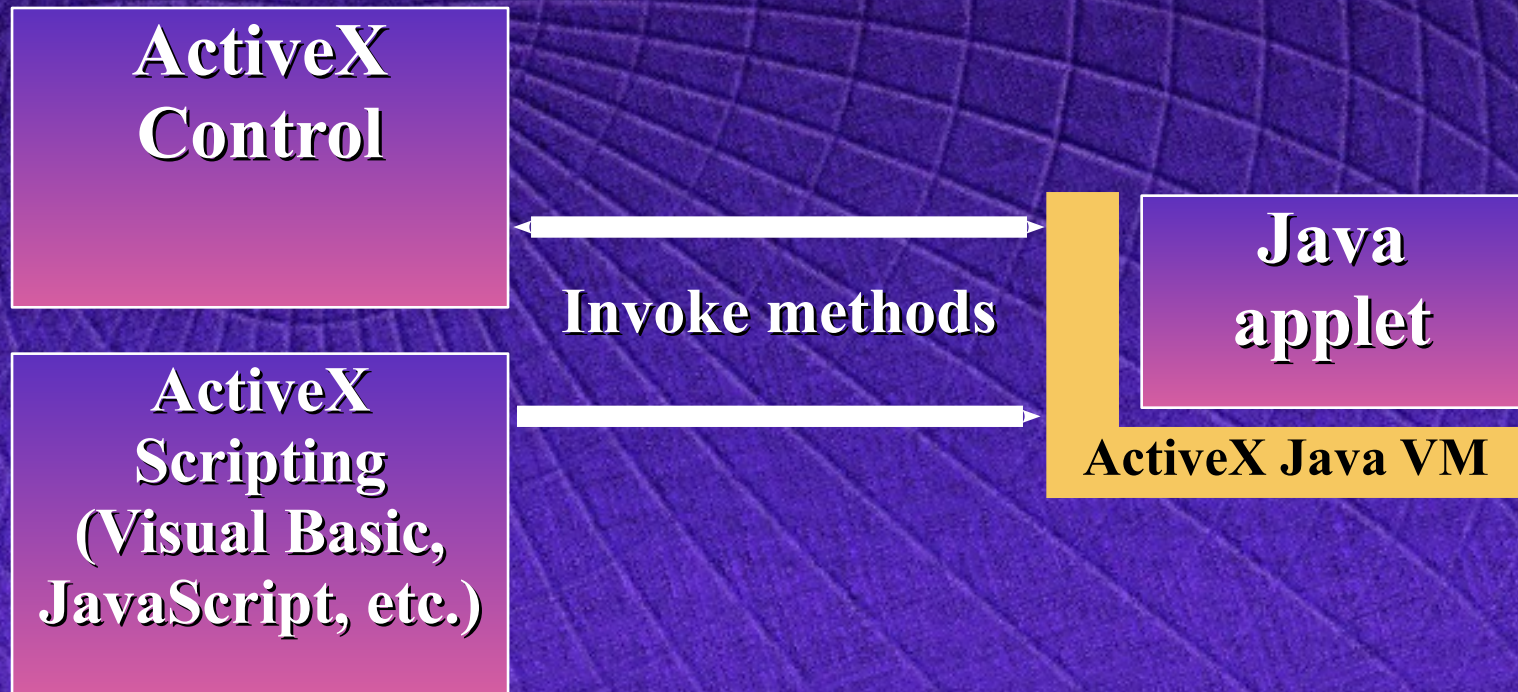
Script ActiveX Controls
using open scripting:

- VBScript
- JavaScript
- Third party script engines



What About Java Language?

- ActiveX technology automatically exposes Java classes as Active Controls
- Automatic integration of Java language with other scripts, languages



ActiveX Multimedia

Direct3D

High performance 3D

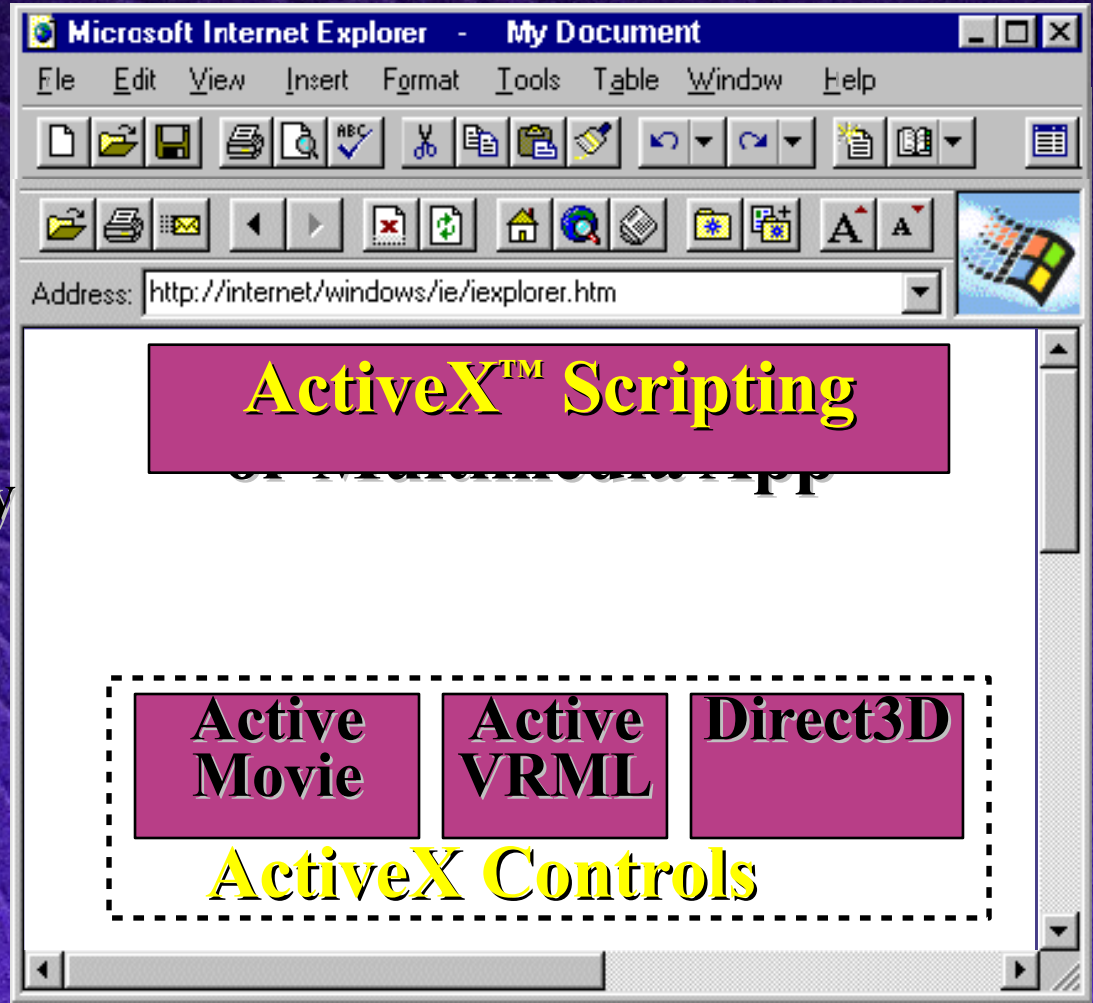
Builds off DirectX

ActiveMovie™

Services for high quality streaming media:
audio, video


ActiveVRML™

Next generation animation





Demo:
WAL*MART



**Steven P. Jobs
Chairman & CEO
NeXT Software, Inc.**

Embracing And Extending

 For the developer

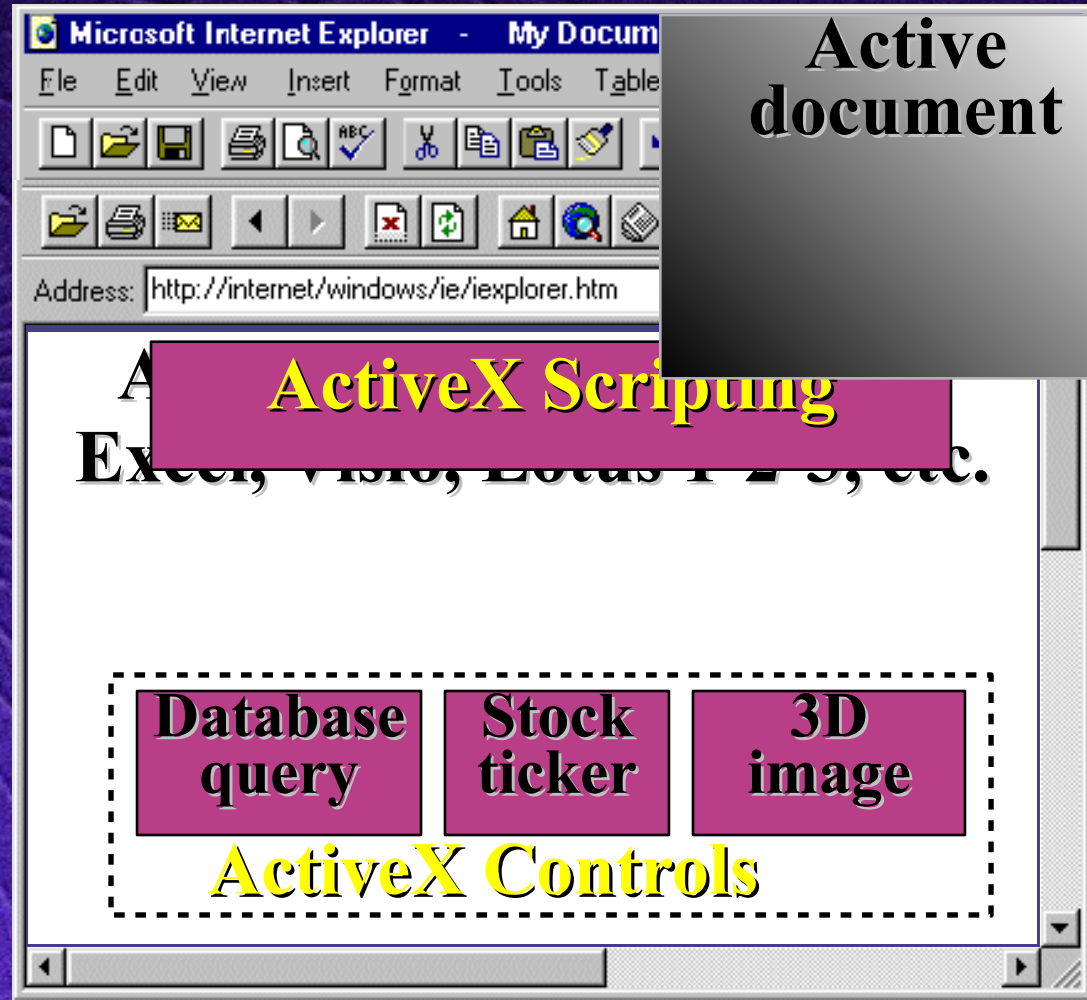
 For the user

 For the Intranet

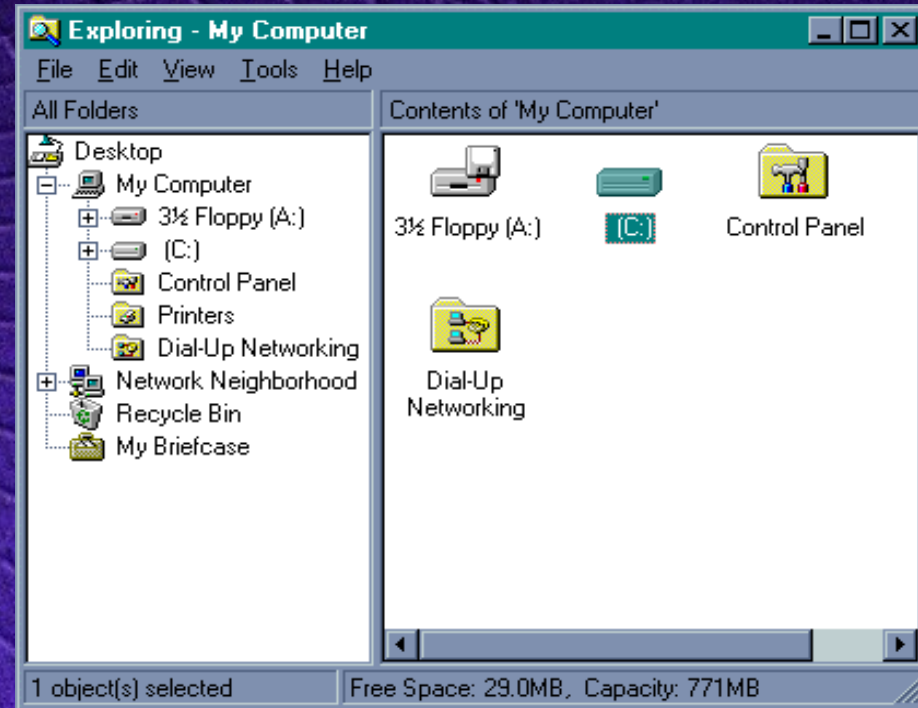
 For the Website

Active Documents

Seamless
“page&links”
navigation through
HTML and native
document formats



Common Navigation: Internet, Intranet, Hard Disk

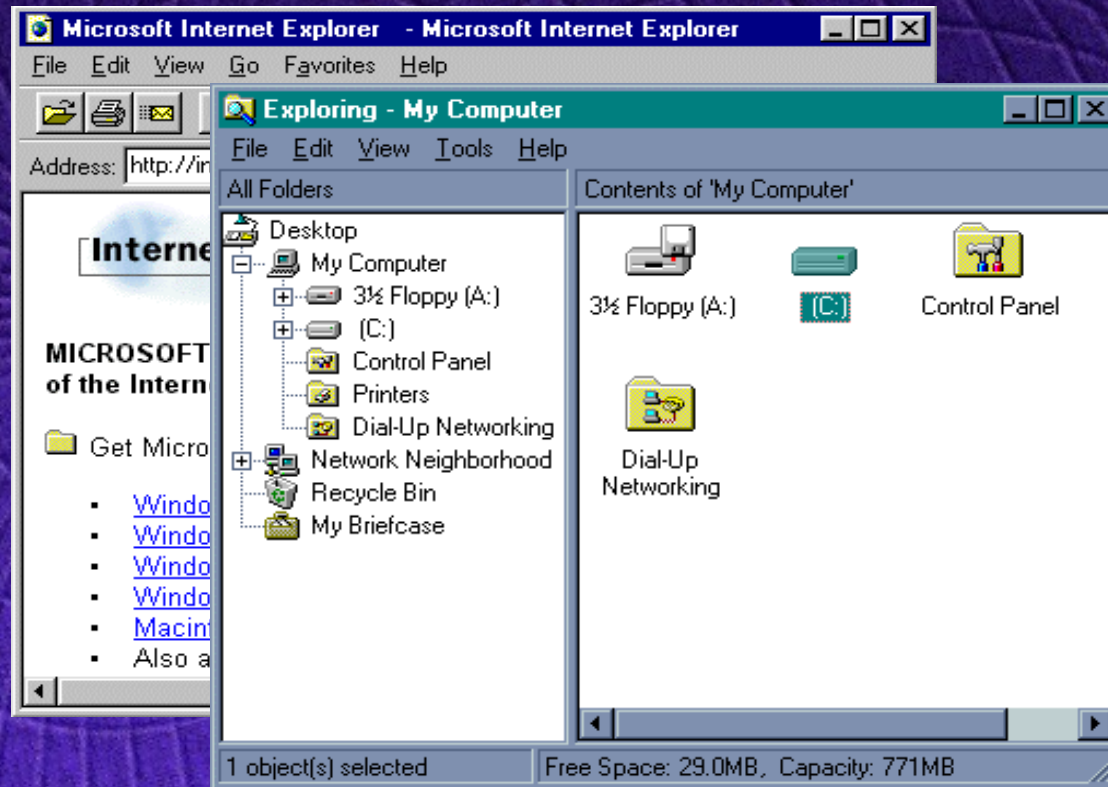


Today:

Two separate tools

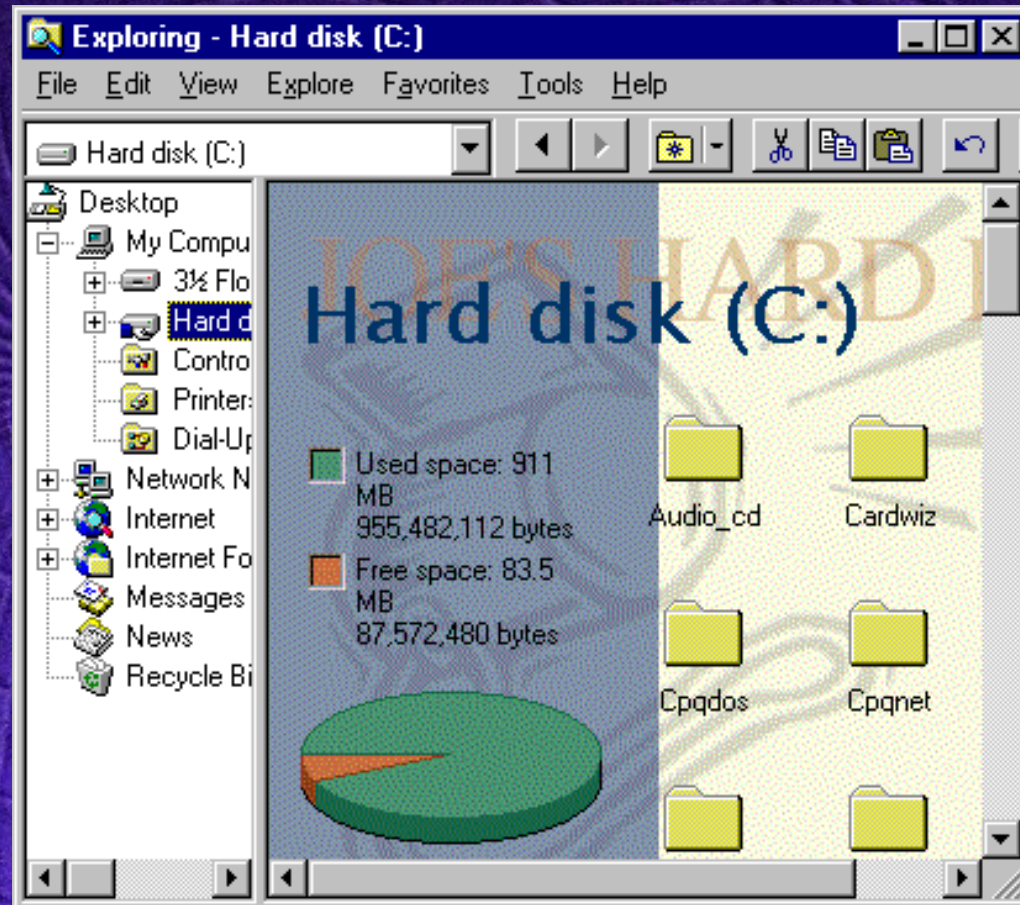
Two paradigms for viewing information

Common Navigation: Internet, Intranet, Hard Disk



Step 1: one tool (merge browser and explorer)

Common Navigation: Best of the Web *plus* best of the PC



Step 2: one paradigm (page and tree view for all information)

Embracing And Extending

 For the developer

 For the user

 For the Intranet

 For the Website



Intranet Requirements:

2. Work with all information stores

Files with PC docs

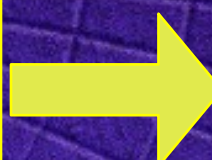
Files with Web Pages

Messages

Databases

4. Proven, scaleable, extensible, integrated, easy-to-admin,

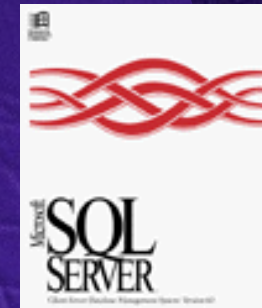
1. Integrated Explorer
- Common navigation, view of information



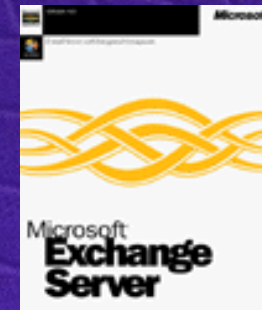
3. Work with existing infrastructure, no charge for new functions

Microsoft Intranet Architecture

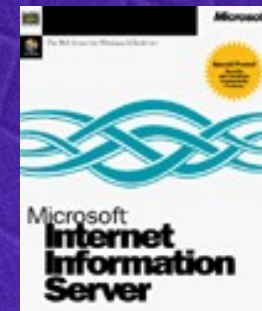
Windows:
Integrated Explorer,
common "page" view



Structured data



Messages



WebPages



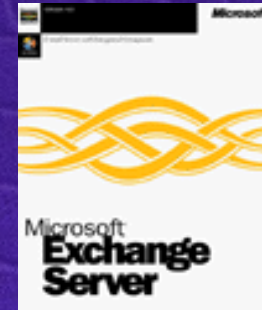
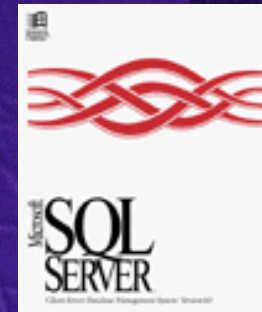
Existing files, documents

BackOffice:

- Integrated platform
- Administration
- Security
- Scalable
- Complete
- Extensible

Extending Out To The World:

Windows:
Integrated Explorer,
common "page" view



Structured data

Messages

WebPages

Existing files, documents

Roadmap

 **Internet**

 **Tools**

 **Windows**

Roadmap: Internet Client

Now

 Internet Explorer line

Mid '96

 Internet 3.0:

H2 '96

 Internet add-on (“Nashville”) for
Windows 95, Windows NT:

Roadmap: Internet Server

 **BackOffice:**



Now

 **Additional services coming in H2 '96**

H2'96

Tools

Goals:

-  Bring ease and quality of MS Visual Tools to the Web
-  Common paradigm for client/server computing: LAN and Web

Common family:

-  Share common integrated development environment
-  All target Internet and ActiveX:
 -  HTML for forms
 -  ActiveX Controls and Scripting on client and server

Tools Family



Less coding, more like a “document”

More coding, more like an “application”

ActiveX platform



**Demo:
Internet Studio**

Internet Infrastructure Open Standards Cooperation

- Microsoft and Intel cooperate on implementing key standards for rich, interactive communication:
 - RTP, RSVP, T.120, H.263, MPEG...
 - Common conferencing APIs
- Safe code: Digital Signing Initiative
- PICS parental control
- HTML eg. W3C Style Sheets, Objects
- IETF Transport Layer Security
- Secure transactions: SET

Windows And The Internet

- **Best foundation for Internet**

- **Built in networking:**

 - Winsock, TCP/IP, PPP dialup

 - RTP, RSVP, PPP tunneling coming

- **Built in acceleration for multimedia:**

 - DirectX is center of innovation for hardware community

- **Option to embrace and extend for huge base of industry investment**

Roadmap: Windows

**Windows NT
Server**



**Windows NT
Workstation**



**Common UI
Common API**

Windows 95



Windows Status

Windows 95 licenses:

Now >20M

By end '96: >50+M

Windows NT Workstations and Server growing fast:

Windows NT Workstation becoming the workstation standard in corporations

Windows NT server is the leading applications server

Upcoming Windows Releases

1995

1996

1997+

Windows NT

Mid '96
Windows NT 4.0
Windows 95
GUI

H2 '96
"Internet
Add-on"
(aka
"Nashville")
Internet
Explorer 3.0
Integrated
Shell/Browser

'97
Cairo

Windows 95

Mid '96
OEM
refresh
inc. IE 3.0

'97
Memphis

Internet Explorer 3.0
will be downloadable, free,
from the net



**Demo:
Best Of The PC,
Best Of The Web**

Opportunity

Microsoft is committed to growing the market

Internet Explorer

- Will promote widespread usage**

- Will integrate into Windows**

- Free on all platforms!**

Integrating Internet, Windows, and BackOffice to make the best Intranet solution

Widest return on investments for the “Active Web”:

- Use in PC documents and apps**

- Use in Web documents and apps**


Announcements

 **ActiveX platform**

 **Microsoft and Intel cooperate on standards for interactive multimedia communication, 100 companies support**

 **Microsoft and Progressive Networks to cooperate on streaming media**

 **Microsoft and SAP to cooperate on open standards for business applications on the Internet**

 **Microsoft and Citrix to integrate ICA client into Internet Explorer 3.0**



Announcements

- Internet Explorer 3.0 Developer pre-release
- Microsoft ActiveX Development Kit and Peer Web Services
- 64 ActiveX Controls supporters
- Digital Signature Initiative and supporters
- Java Language license
- Microsoft and Macromedia to implement ActiveX on the Macintosh





Q&A