

Application Virtualization

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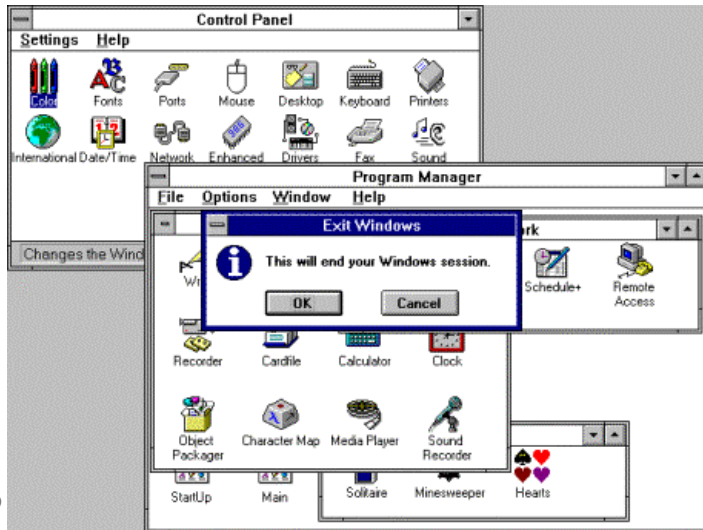
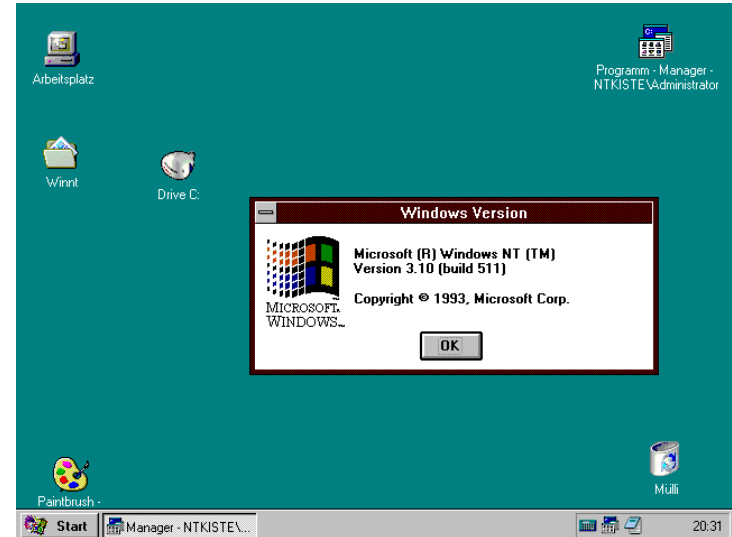
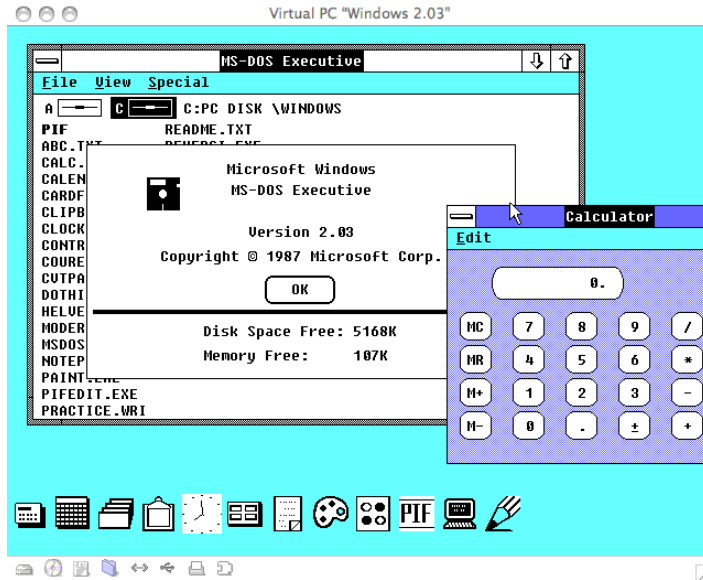
Agenda

- History
 - What Happened?
 - Challenges
 - Application Deployment Today
- Application Virtualization
- Demo Video

In the beginning.. (well, close to it)

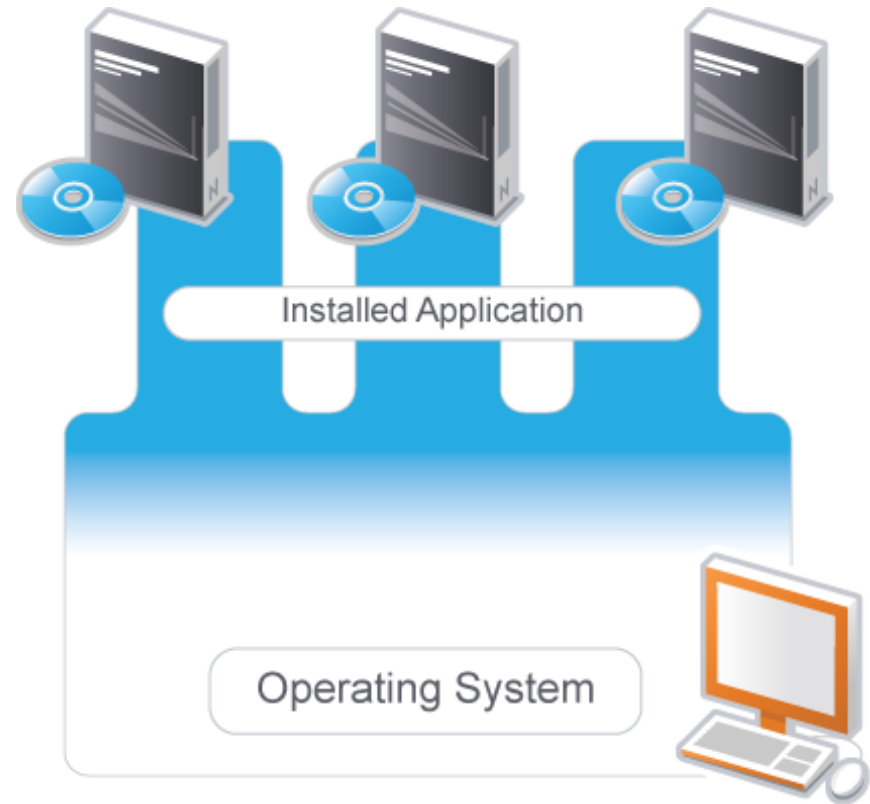
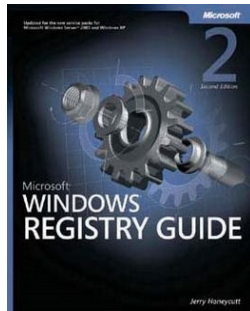


Enhancements or Complexity?



So what happened?

- INI files
- Shared DLLs
- Centralized Registry
- Common Object Model
- Evolving Hardware
(16-bit, 32-bit, 64-bit)



Application Deployment

- setup.exe
- MSI packaging
- Terminal Server/Citrix
- Web applications
- Application Streaming / Virtualization

Challenges

- Repackaging time
- Regression testing
- Network bandwidth
- Installation time
- User downtime
- Environment and technology complexity

Today's Desktop Applications

- Failed application installations
- Too many images to maintain & patch
- Application incompatibilities
- Software & registry conflicts
- Contingency planning & execution
- Security is top priority
- Testing is expensive and time consuming

Application Virtualization

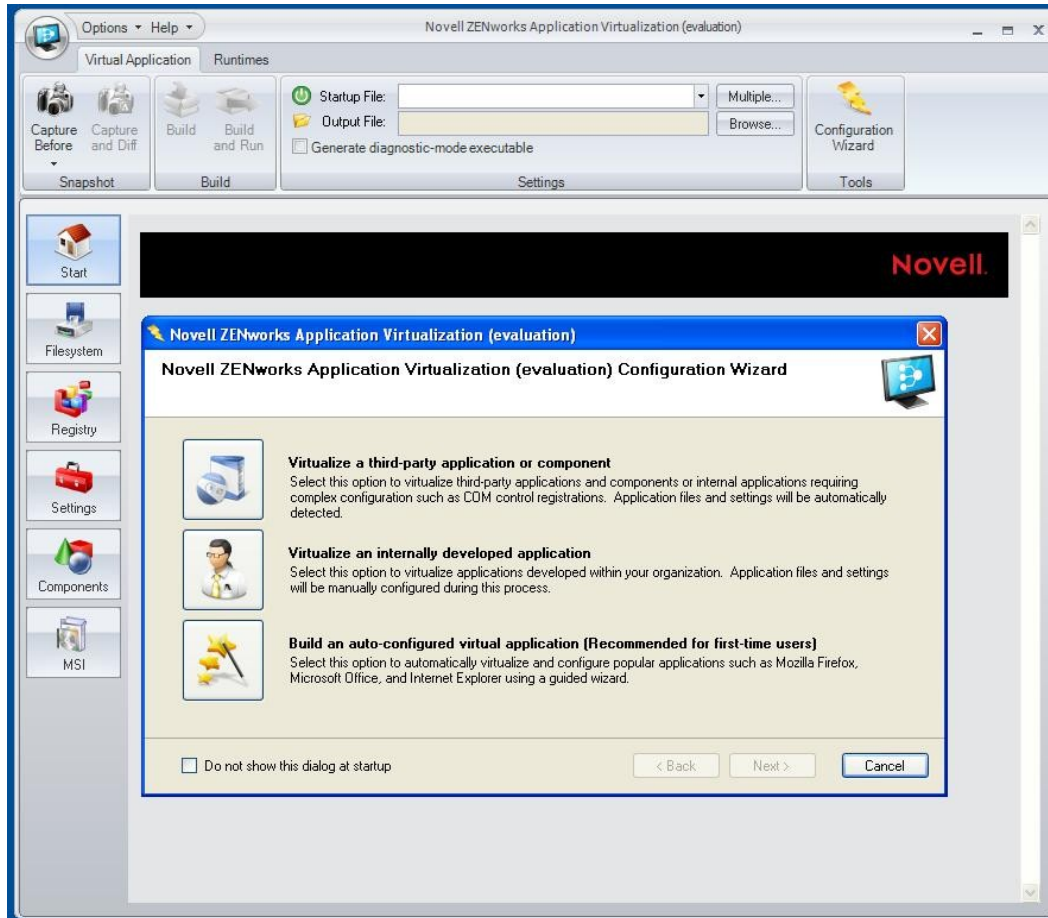
The bottom of the slide features a series of five horizontal, glowing white lines that fade out towards the right, set against the blue background.

Application Virtualization



Applications run isolated from host system. Nothing is installed. Applications do not change the OS, registry settings or .dll's.

ZENworks Application Virtualization



Convert applications to a single, isolated file that runs instantly without a change to your standard operating environment.

Why use application virtualization?

- Simplify application deployment
 - Copy the EXE to the device and its ready to go
 - No UAC prompts since no install ever happens
 - Upgrades are as easy as providing a new EXE
- Eliminate application conflicts
 - Since each application can be completely isolated from others you can eliminate “DLL-hell”
- Solve application compatibility issues
 - Run multiple versions of an application simultaneously
 - Run legacy applications on newer OS's (IE 6 SP1 on Vista)

Why use application virtualization?

- Portability
 - Virtualized applications and their sandbox can be stored on removable devices
 - Virtualized applications can be executed on restricted (kiosk) type devices
- Easily deploy .NET and Java applications
 - No need to install .NET or Java on the machine, just add it to the virtual package
- Security
 - Since the application can be isolated from the real registry and file system no need to worry about applications damaging the machine
 - User does not have to be administrator to execute the app

A Better Way to Run Applications

- No application, .dll or registry conflicts
- Self contained including needed runtime components
- Applications run instantly
- 100% removal of software
- No additional client software
- Portable application

ZENworks Application Virtualization

- ✓ Application executes from a single file, without installation, completely isolated.
- ✓ Zero client footprint, no server infrastructure.
- ✓ Run applications instantly from anywhere including HD, USB and DVD.
- ✓ No end user experience change.
- ✓ Custom templates & 70+ certified applications.
- ✓ Virtualize commercial and in-house developed applications

Sample of Certified Applications

- Adobe Acrobat Reader 5, 6, 7, and 8
- Adobe Illustrator CS2 and CS3
- Adobe Photoshop CS2 and CS3 Adobe / Macromedia Dreamweaver 8 and CS3
- Adobe / Macromedia Flash Professional 8 and CS3
- Adobe / Macromedia Freehand MX
- Apache Foundation HTTP Server 2
- Apple iTunes
- Autodesk Maya 7 and 8
- Axialis IconWorkshop 6
- AxoSoft OnTime Client 5
- BusinessObjects Crystal Reports 9 Pro
- Cerulean Studios Trillian 3
- Citrix Program Neighbourhood 9
- Citrix Access Gateway Admin Client
- Corel CorelDraw 12
- Corel Painter IX
- EasyBoot Systems UltraISO Premium 8.6
- FileZilla FileZilla 3
- The GIMP Team GIMP 2
- Google Google Earth
- Google Google Picasa
- Google Google SketchUp
- GreTech GOM Player 2
- Corel Paint Shop Pro 7
- Parametric Technology Mathcad 13 and 14
- MathWorks Matlab
- Microsoft Internet Explorer 6 and 7
- Microsoft Office 97, XP, 2003, and 2007
- Microsoft Visual Basic 6
- Microsoft .NET Framework 1.1, 2.0, 3.0, and 3.5
- Microsoft Remote Desktop Client
- Microsoft Windows Media Player
- Mozilla Firefox 2 and 3
- MySQL MySQL 5
- Nullsoft Winamp 5
- Opera Software Opera 9
- Oracle Oracle 9 Client
- Oracle Oracle Calendar Desktop
- PGP PGP Desktop
- Quark Express 5
- Roxio Creator Plus
- SAP SAP GUI 6
- Siemens Unigraphics NX
- Skype Skype 2
- Softera LDAP Browser 2
- SolidWorks Solidworks 2008
- Sun Microsystems Open Office 2
- SystemTools Hyena 6.7
- Ulead DVD Player 1.1
- VanDyke SecureCRT 5
- WinRAR WinRAR 3.6
- WinZip WinZip 11
- Wolfram Research Mathematica 5
- X-Ways WinHEX 13

Benefits



Higher Productivity: Reduces downtime & recovery time. Accelerates roll outs. Mobility. Fewer service desk calls.



Lower costs: Reduce testing. Eliminate service desk calls. Greater flexibility & interoperability.



Maintain Security: Protects during changes. Insures business continuity.

Common Use Cases



New Applications: Test, rollout & rollback easily without install or uninstall.



Applications on a Memory Stick: Completely portable. Leaves no trace on host PC.



Application Compatibility: Applications not fully compatible. IE6 browser based business applications on Vista.

Return on Investment



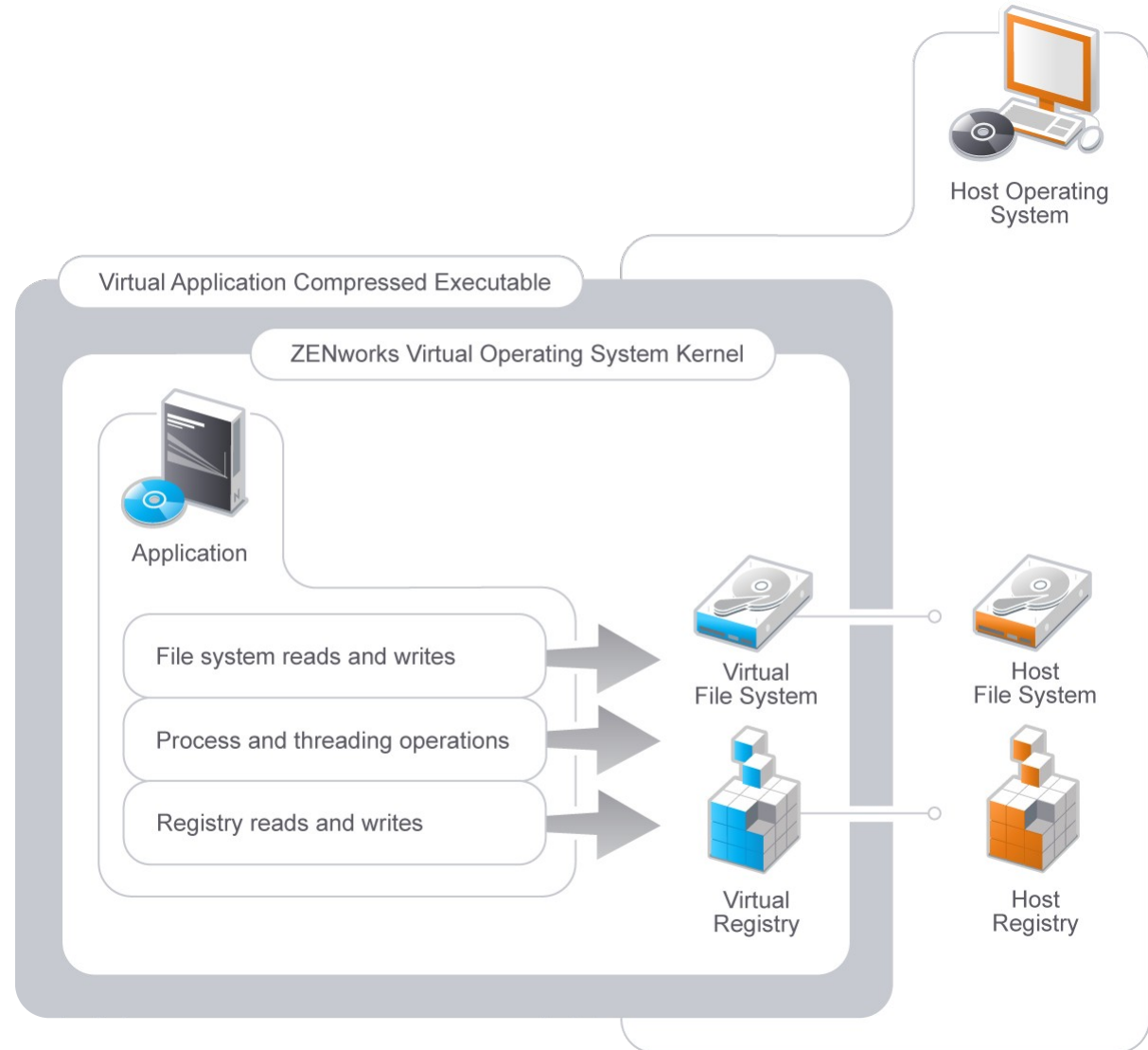
Gartner Inc.

“Virtualized applications can reduce the cost of testing, packaging and supporting an application by 60%, and they reduced overall TCO by 5% to 7% in our model.”

Gartner, Inc. “TCO of Traditional Software Distribution vs. Application Virtualization” by Michael A. Silver et al, April 16, 2008

Virtualized Applications

- No perceived impact on user productivity
- Applications can run 100% self-contained, including any data and documents created by the user



Versus Traditional Install

Application Virtualization

- Zero setup or install
- No privileges required
- Pre-configured
- Side-by-side w/out conflict
- IE 6 runs on Vista
- Light compatibility test

Traditional Applications

- Installation glitches
- Requires privileges
- Requires configuration
- Conflicts between versions
- IE 6 broken on Vista
- Heavy test matrix

Versus Machine Virtualization

Application virtualization

- Near zero performance loss
- Compact size and format
- Dozens of instances running together
- Efficient use of resources
- Single OS license
- No user impact



Machine virtualization

- Significant performance loss
- Massive VM image
- Very few instances can run at the same time
- Wasted & redundant resources
- Add'l OS licensing
- Potential user impact

Demo Video

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