Simplifying Software Management through Application Virtualization

VMware ThinApp®

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Demo 1
Running Virtual MS PowerPoint
Application Virtualization Defined

- Application virtualization is a technology that improve portability, manageability and compatibility of applications by encapsulating them from the underlying operating system on which they are executed.

- A fully virtualized application is not installed in the traditional sense[1], although it is still executed as if it is.

- The application is fooled at runtime into believing that it is directly interfacing with the original operating system and all the resources managed by it, when in reality it is not.

- Application virtualization differs from operating system virtualization in that in the latter case, the whole operating system is virtualized rather than only specific applications.

Wikipedia
Turns Monolithic System To Modular

- Virtualization breaks the bond between each layer
- Allows IT to manage each layer separately
- Users can pick HW and apps while still locking down desktop
- Supports server hosted desktops and PCs
VMware ThinApp Application Virtualization:

- An packaging tool which allows standard applications virtualize and packaged into a single executable.
- ThinApp packages do not require administrator rights to execute
- Allows for distribution of key applications without any local installation at end-points.
- No agent is required on the end-point
- Fully Portable (Copy to a USB stick)

VMware ThinApp Streamlines the Application Life Cycle:

- Access: apps locally or over a network on PCs, thin clients and removable media.
- Upgrade or Develop: custom in-house apps, 3rd-party/vertical solutions and commercial apps.
- Package: apps inside EXE and MSI files with no source code changes.
- Deliver: apps against desktop images and other apps with real-time diagnostics.
- Test: apps using existing management tools and infrastructure.
Why Are Customers Using Application Virtualization?

- Simplify installation and maintenance - One file to distribute
- Eliminate conflicts via application isolation
- Deploy faster with less regression testing
- Run different versions of the same app.
- Package runtime components –Java, .NET with application – decouple from OS
- Lock down PCs – run apps in User Mode
- Consolidate Terminal servers (e.g., Citrix)
- Facilitate VDI Initiatives
- Smooth Vista Migrations—use applications ordinarily not compatible with Vista
Demo 2
Packaging ThinApp Applications
Works with Existing Delivery Tools

Audit & Deliver ThinApp Packages from same system as natively installed applications (MS, BMC, HP, CA)

VIRTUALIZATION FORUM 2008
Application Sync

Turn IT into a profit center

- Manage applications in the extended enterprise: Partners, Subsidiaries
- Ship only what they need, when they need it

Without business interruption

- Flexible delivery to a variety of devices (USB, Thin Client, PC)
- Conflict free application updates for unmanaged PCs (WAN)

HTTP/HTTPS byte level updates over WAN/LAN via Active Directory
Enhance License Management

- Reduces package size to ease deployment & delivery
- Enhances software license management tracking via current inventory tools

Seamless Interoperability

- ThinApp packages can link to each other & OS
- Enables interoperability between virtual applications and underlying OS
Demo 3
Access Applications Anywhere
Simplify Delivery & Reduce Costs with VDI + ThinApp

Reduce storage
- Reuse templates
- Install VM without apps

Simplify software delivery—no agents or infrastructure
- Multiple versions of same app installed on VDI image
- Many ways to deliver shortcut
- Plugs into existing App Mgmt tools w/o infrastructure

Streamline Patch Updates
- Modify 1 app for whole environment
- In-place upgrades
Case Study: US Department of Defense

Challenges
➤ Advanced data analysis applications, commercial apps
➤ Locked down and secured desktops
➤ Mixed platforms from Windows 98 to XP
➤ High percentage (20%) of post installation conflicts

Solutions
➤ Stability and Security
➤ Terminal Server/Citrix

Results: Flawless Deployment
➤ Eliminated installation conflicts
➤ Shaved QA testing
➤ Maintained older apps
➤ Run applications easily beyond standard image, even those requiring admin rights
➤ Flawless End User experience

“We needed a way to deploy our applications that was really, well, a non-deployment. We were spending too much time testing and tweaking our applications for each Windows version, and still had installation failures about 20% of the time which required extensive, one-off troubleshooting, and frustrated the end user.”

- Harvey Gilbert, DOD System Architect
Summary

➢ **Agentless architecture**
  - No compatibility issues with multiple versions
  - No backend infrastructure requirements
  - 100% User mode execution

➢ **Widest platform support**
  - Support for 16, 32 & 64bit windows,
  - Windows NT, 2K, XP, Vista, W23K
  - Citrix PS 4.x and MS Terminal Services

➢ **Support for the widest array of applications**
  - Support for wide variety of .NET and Java runtimes
  - Multiple versions of Internet explorer – run IE 6 & IE 7 on the same machine

➢ **Works with what you have now!**
  - AdminStudio, MS SMS, BMC (Marimba), Altiris, HP, IBM, CA, Matrix42 and more…
Q&A

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What Issues Are We Having Today?

- Increasing cost of Application Deployment and Desktop Management with higher security requirements
- Need for more secure desktops
- Downtime and support too expensive
- Pressure to reduce infrastructure cost by centralizing IT
- Migration to XP, Vista, and .NET
- Business Continuity and Disaster Recovery