

Microsoft

DESKTOP VIRTUALIZATION

Microsoft® desktop virtualization encompasses a broad set of solutions that empower companies to address their unique business, IT, and end user challenges while preserving their existing IT infrastructure investments.

With offerings to virtualize the application, data, and Windows® operating system (OS) layers, companies can choose the technologies that allow them to best optimize and manage their desktop infrastructure.

Customers new to desktop virtualization may begin by virtualizing applications and user data to help immediately reduce operational costs and standardize the desktop environment. Then they can evaluate the desktop virtualization technologies at the OS layer. By introducing new deployment methods, these solutions are particularly valuable for increasing business flexibility.

Microsoft Offers Your Business:

- The choice of a flexible solution to meet your company's specific needs
- A lower total cost of ownership
- Integrated management through a single pane of glass
- Solutions built on the familiar Windows and Microsoft System Center interfaces that have the benefit of Microsoft's 20+ years of experience in the desktop market



Why Consider Desktop Virtualization?

- ✓ Reduce total cost of ownership
- ✓ Increase business agility and continuity
- ✓ Enable anywhere access
- ✓ Improve security and compliance

Customer Results

"Windows 7 has proven to be very stable and to work well with our virtualized applications. We plan to use Microsoft System Center Configuration Manager 2007 R2 and App-V to help us automate our Windows 7 deployment to 10,000 computers beginning in March 2010."

SEBASTIAN HÄMPELIT, MANAGER, STEINBUCH CENTRE FOR COMPUTING, KARLSRUHE INSTITUTE OF TECHNOLOGY

"By putting in VDI centrally, we no longer have to replace 1,200 desktops that had reached the end of their life cycles—it would have been a time-consuming and expensive project."

COLIN FITZSIMONS, SENIOR SYSTEMS ENGINEER, LANCASHIRE CONSTABULARY

IT Challenges and Priorities

In today's business environment, companies are challenged to address a wide variety of frequently conflicting questions and concerns in their organizations.

Evolving end user needs, economic uncertainty, and compliance and regulatory pressure further exacerbate these issues.

Managing these challenges effectively and coming up with workable, creative solutions will ultimately help to make businesses more successful.

Today's Customers:

- Need a comprehensive virtualization strategy for today and into the future
- Want one tool to manage all of their physical and virtual assets — from the desktop to the datacenter
- Can't afford to start over and need to find a solution that maximizes their existing IT investments

Desktop Virtualization Solutions



User Data, Settings

Enable users to access their data from anywhere, at any time.

Microsoft User State Virtualization

- » For All Desktops
 - Lets users access their data and settings from anywhere, at any time
 - Provides easier recovery from PC failure and theft
 - Simplifies IT management of user data and settings



Applications

Deliver applications on demand to users.

Microsoft Application Virtualization (App-V) or RemoteApp

- » For All Desktops
 - Helps deliver immediate cost savings
 - Provides maximum flexibility for users by making applications available from anywhere, at any time
 - While both App-V and RemoteApp host applications remotely, applications delivered with RemoteApp appear to be running side-by-side with local applications



Operating Systems

Deploy a single image across physical and virtual environments.

Microsoft Virtual Desktop Infrastructure (VDI) with Remote Desktop Services (RDS)

- » For Connected Desktops where Personalization is Important
 - Gives users anywhere access to their personalized Windows-based desktops, hosted in the datacenter
 - Increases security and data protection, while also improving business agility and continuity
 - Can be particularly effective for:
 - + Providing a managed desktop to unmanaged devices
 - + Centralizing desktop management for remote locations
 - + Task worker scenarios
 - + Desktops that demand high levels of security and compliance

Session Virtualization* with Remote Desktop Services

- » For Connected Desktops where Personalization is Not Important
 - Delivers session-based desktops or applications in high-density situations
 - Works for low complexity or task worker scenarios
 - Requires less hardware and server management than VDI

Microsoft Enterprise Desktop Virtualization (MED-V)

- » For Desktops with App-OS Compatibility Issues
 - Enables companies to deploy Windows 7-based desktops without having to worry about application compatibility
 - Runs applications locally in a Windows XP-based Virtual PC
 - Provides companies with the ability to run two operating systems on one device, adding virtual image delivery, policy-based provisioning, and centralized management

*Formerly known as Terminal Services

Deploy Integrated Management through a Single Pane of Glass

System Center delivers the integrated management tools necessary for managing physical and virtual environments through a single console.

- Provides the ability to deliver users targeted physical and virtual applications, software updates, and other configuration management services
- Features integrated incident awareness, response, problem tracking, helpdesk support, remediation, recovery, and reporting across physical and virtual PCs and applications
- Offers centralized, policy-based management

Licensing for Desktop Virtualization

Windows 7, Windows Vista, and Windows XP

Technologies for User State Virtualization are available as part of the Windows XP, Windows Vista®, and Windows 7 Business SKUs. Windows XP Virtual Machine + Virtual PC are available with Windows 7 Pro SKU and above. Customers with Windows Software Assurance (SA) have the ability to install up to four virtual copies of Windows on their machines.

Microsoft Desktop Optimization Pack (MDOP)

Application Virtualization and Microsoft Enterprise Desktop Virtualization are both components of the MDOP suite, which is an add-on subscription for Software Assurance, priced at ~\$9/device.

Microsoft Virtual Desktop Infrastructure Suites

The Microsoft VDI Standard Suite and Microsoft VDI Premium Suite volume licenses enable customers to purchase the different infrastructure and management components of the comprehensive Microsoft VDI offering through a simple, unified subscription license. The VDI Standard Suite includes the components required for a basic VDI deployment; for more flexibility, the VDI Premium Suite includes additional desktop and application deployment options.

Windows Virtual Desktop Access (VDA)

Windows VDA is a device-based subscription that currently retails for \$100/device/year. Since Windows VDA is licensed per accessing device, it is independent of the number of virtual machines (VMs) in the datacenter, allowing access to up to four VMs concurrently. Each Windows VDA license also includes extended roaming rights, which allow the primary user of a Windows VDA device at work to access their personal VDI desktop from any device not owned or controlled by their corporation, thereby allowing them to roam between devices outside of the corporate firewall.

Resources

For more information on Microsoft desktop virtualization, please visit:
<http://www.microsoft.com/virtualization>

For more information on Microsoft System Center, please visit:
<http://www.microsoft.com/systemcenter>

For more information on Windows Server® 2008 R2, please visit:
<http://www.microsoft.com/windowsserver2008>

For more information on Windows 7, please visit:
<http://www.microsoft.com/windows/windows-7>