

Enabling the Windows Optimized Desktop through Windows 7 Enterprise and Windows Server 2008 R2

There is more pressure than ever on information technology (IT) departments to deliver business value, despite the challenges of shrinking budgets, rapidly changing technologies, and increasing security issues. Organizations need technologies that help them reduce costs, manage their dynamic workforce, enhance end users' experiences, and increase productivity. Additionally, organizations must continue to meet the demands of the security regulations imposed on them.

To help organizations address these demands, Windows® 7 Enterprise and Windows Server® 2008 R2 provide technologies to help build an infrastructure for the Windows Optimized Desktop. When deployed together, Windows 7 Enterprise and Windows Server 2008 R2 combine values that can increase productivity for end users and IT professionals and create a more secure and well-managed infrastructure to reduce operational costs and complexity.

The following table summarizes the features in Windows 7 Enterprise and Windows Server 2008 R2 that deliver combined value to optimize the desktop infrastructure within your organization:

Benefits	Windows 7 Enterprise and Windows Server 2008 R2 Combined Value Features
Enhance user productivity	<ul style="list-style-type: none"> • DirectAccess provides seamless access to files and applications from any location without a VPN • BranchCache reduces bandwidth and latency in branch locations • Receive Windows Auto-Tuning and Server Message Block 2.0 improve network transfer performance • Virtual Desktop Infrastructure enhancements provide a rich user experience when accessing a server-based Windows 7 desktop
Protect sensitive data	<ul style="list-style-type: none"> • Network Access Protection enforces health requirements on PCs before granting full network access • Server and Domain Isolation enforces infrastructure security policies
Reduce costs with greater manageability	<ul style="list-style-type: none"> • DirectAccess allows the management of computers—even when off the corporate network • BranchCache reduces WAN bandwidth consumption • Remote Desktop Services provides seamless access to server-based applications • Event Subscriptions help administrators monitor and troubleshoot client computers

Enhance user productivity

Users are asked to accomplish more every day—and to work from a wide variety of locations. Windows 7 Enterprise and Windows Server 2008 R2 remove barriers that keep people from accessing their information, regardless of where it is stored, and help them stay productive when at home, on the road, or working from a branch office.

There is a growing number of remote or mobile workers each year. These users often face challenges connecting to corporate resources when they are on the road. **DirectAccess** uses industry standard protocols, including IPv6 and IPsec, to enable remote users to seamlessly access the corporate network from anywhere they have an Internet connection. They do not need to initiate a VPN connection, which increases their productivity.

The number of branch offices and the number of employees who visit those branch offices is also increasing rapidly. The productivity of branch office users can be negatively affected by network bandwidth limitations and latency in application response times.

Windows 7 Enterprise and Windows Server 2008 R2 introduce **BranchCache™** to help improve end user productivity in branch offices. BranchCache caches content within the branch location from remote file servers and Web servers. Users in the branch can more quickly download this information.

Additionally, features in Windows 7 Enterprise and Windows Server 2008 R2 improve the network transfer performance. **Receive Window Auto-Tuning** dynamically adjusts the amount of data that a computer can receive from the network at any given time. **Server Message Block (SMB) 2.0** enables faster file transfers, uses less network traffic, and increases reliability.

Virtual Desktop Infrastructure (VDI) enhancements that are available in Windows 7 Enterprise and Windows Server 2008 R2 provide a rich and consistent computing experience when the user accesses a Windows 7 desktop that is running Hyper-V™ technology. VDI supports multiple monitors, bi-directional audio, and local printing from remote desktops.

Protect sensitive data

Protecting data is of primary importance to any IT department, and many organizations are bound by industry or government regulations to protect data from unauthorized access. Windows 7 Enterprise and Windows Server 2008 R2 can help this effort through policy-based network security. This allows only healthy computers to access network resources.

Network Access Protection (NAP) provides extra policies to monitor and assess the health of client computers when they attempt to connect to or communicate on a network. Client computers that do not meet the additional requirements can be restricted from network access until their configuration is

updated and brought into compliance with the policies.

Through Group Policy, IPsec, and the Windows Firewall, **Server and Domain Isolation** helps enforce network security policies. These features enable administrators to segment their network environment into isolated logical networks that restrict access to specific computers or users. The result is that organizations can better control and enforce how resources are used.

DirectAccess brings all these technologies together to provide better security for your enterprise. DirectAccess uses IPsec for authentication and encryption. Optionally, you can require smart cards for user authentication. DirectAccess integrates with NAP to require that DirectAccess clients comply with system health requirements before connecting to the DirectAccess server. IT professionals can configure the DirectAccess server to restrict the servers that users and individual applications can access.

Reduce costs with greater manageability

Reducing costs is a key imperative that all organizations deal with. Windows 7 Enterprise and Windows Server 2008 R2 can help organizations reduce cost, increase the manageability of their IT environment, and provide flexibility to end users so that they can stay productive.

With **DirectAccess**, IT professionals can manage mobile computers any time the mobile computer has Internet connectivity, even if the user is not logged on. This allows remote computers to be managed regularly and helps ensure that mobile users stay up-to-date with security and system health policies. Because the remote computer is always connected to the corporate network, Group Policies can be updated, software and updates can be distributed, and data files can be cached between the computer and a networked shared resource. DirectAccess helps organizations meet regulatory and privacy mandates for security, and data protection for assets that roam beyond the corporate network.

BranchCache helps reduce WAN link utilization in branch offices while supporting your existing security requirements. BranchCache can help reduce costs by:

- Reducing WAN bandwidth consumed by end-users for intranet-based HTTP and SMB traffic.
- Accelerating the delivery of encrypted content by using HTTPS and IPsec.
- Not requiring additional equipment in branch offices and using Group Policy settings to manage the domain.

Remote Desktop Services (RDS) provides quick and seamless access to server-based applications from client desktops. It enables IT professionals to publish application icons directly onto client Start menus. This provides a seamless experience for end users,

reduces calls to the help desk, and reduces costs for deploying applications.

Event Subscriptions help collect critical client and server system events on a central help desk. It helps IT professionals forward specific system events from critical clients or servers to their Event Viewer. Then the appropriate expert can proactively solve the issues before they impact productivity.

Complete Value with the Microsoft Desktop Optimization Pack

Windows 7 and Windows Server 2008 R2 combine to deliver the best infrastructure to build the Windows Optimized Desktop. Deploying the Microsoft Desktop Optimization Pack (MDOP) technologies along with Windows 7 and Windows Server 2008 R2 provides the virtualization and management solutions that help decrease desktop TCO by enabling IT professionals to better manage their environments and deliver more dynamic desktop solutions to their users. Together, Windows 7, Windows Server 2008 R2, and MDOP provide an improved end user experience, better IT responsiveness, predictable desktop deployment, and decreased TCO.

Learn more

[Windows 7 for the Enterprise](#)

(<http://go.microsoft.com/fwlink/?LinkId=150351>)

[Introduction to Windows Server 2008 R2](#)

(<http://go.microsoft.com/fwlink/?LinkId=135818>)

[Download Windows 7 and Windows Server 2008 R2 Release Candidates](#)

(<http://go.microsoft.com/fwlink/?LinkId=150352>)

[Microsoft Desktop Optimization Pack](#)

<http://www.microsoft.com/windows/enterprise/products/mdop.aspx>

Features:

[BranchCache](#)

(<http://go.microsoft.com/fwlink/?LinkId=149834>)

[DirectAccess](#)

(<http://go.microsoft.com/fwlink/?LinkId=142598>)

[Event Forwarding](#)

(<http://go.microsoft.com/fwlink/?LinkId=150354>)

[Network Access Protection](#)

(<http://go.microsoft.com/fwlink/?LinkId=150355>)

[Receive Window Auto-Tuning](#)

(<http://go.microsoft.com/fwlink/?LinkId=140234>)

[Remote Desktop Services](#)

(<http://go.microsoft.com/fwlink/?LinkId=150356>)

[Server and Domain Isolation](#)

(<http://go.microsoft.com/fwlink/?LinkId=147166>)

[Server Message Block 2.0](#)

(<http://go.microsoft.com/fwlink/?LinkId=140234>)

[Virtual Desktop Infrastructure](#)

(<http://go.microsoft.com/fwlink/?LinkId=150351>)