Windows 8 Consumer Preview

Product Guide for Business

Table of Contents

Product Guide for Business

How people do their work in has changed dramatically during the last decade. Today's users have access to latest technology in their personal lives, and are increasingly technically savvy. Device proliferation, form factors and capabilities of the modern devices as well as explosion of social media technologies constantly push user expectations of technology to the new limits As a result, people increasingly have a say in what technology they use at work and they expect technology to support their needs, preferences and individual work styles.

Built on the solid foundation of Windows® 7, Windows 8 helps businesses unleash the full power of their people while meeting modern users' expectations of technology. With seamless connections to people and information, full-screen immersive apps, and built-in malware resistance, strong authentication, and data encryption, Windows 8 provides a great user experience along with a more secure and manageable platform.

Windows is reimagined to best support people's unique working styles. The new user interface and app model enables workers to be more productive with immersive apps. A reimagined Start screen comes alive with activity, helping people stay current with the latest information. Businesses can create their own immersive line-of-business apps to help improve worker productivity.

Windows 8 delivers great features for businesses that deliver experiences users want, offers new possibilities for users to be mobile and productive practically anywhere, and provides IT with more secure, easy-to-manage intelligent infrastructure.

Windows 8 helps bridge the gap between users who want a more personal and meaningful experience and IT professionals who want a more secure, manageable operating system.

People are a businesses' greatest asset. To help companies unleash the full power of their workforce, Windows 8 puts people at the center of every experience. Today's tech-savvy workers want modern experiences both at home and at work. The current generation of workers is highly connected, with technology at the center of their lives. Windows 8 bridges the gap between a great personalized experience for users and the security and management features that IT professionals trust.

Innovative user interface

The new Windows 8 Start screen provides an intuitive and easy-to-use interface. With fully immersive Windows 8 apps and support for multi-touch and traditional keyboard and mouse interfaces, users can be more productive.

Line-of-business app development

Businesses can create their own apps for Windows 8 that are immersive and enhance worker productivity. Critical line of business apps can benefit from an immersive full screen, allowing workers to easily interact with the app. Apps that support "snapped" view allows workers to multitask between immersive applications.

Enterprise developers can create Windows 8 apps that are critical for their business and feel confident that they maintain control over the deployment and access to their apps. Businesses can load their Windows 8 apps onto their domain-joined PCs running Windows 8 Consumer Preview, bypassing the Windows Store. An app that is created in an enterprise can stay within the corporate firewall and be centrally managed, updated, and distributed. IT professionals can disable access to Windows Store by using Group Policy and specific applications within the Windows Store can be allowed or blocked by using AppLocker®.

Windows 8 retains the power and flexibility of the Windows desktop. Many of the innovations that were included in Windows 7 are also available in the desktop in Windows 8, from Jump Lists to Snap. The majority of your existing line-of-business applications that run on Windows 7 will also run on Windows 8 (32-bit and 64-bit versions).

Start screen

With the new Windows 8 Start screen, business data is at your fingertips. Enterprises can create their own Windows 8 apps that are immersive and real-time. Live tiles display notifications from web services or other sources, allowing workers to have access to the latest data they need. A worker in a warehouse can view stock inventory warnings with data displayed on a live tile. With a single tap, they can open an app that lets them make changes or review more detailed information. Supply chain managers can track shipments and schedules. Executives can see the latest stock prices, sales data, or financial forecasts directly on the start screen.

Touch-first experience

A touch-first experience is ideal for today's workers and users can experience new levels of productivity. Supporting both multi-touch and traditional keyboard and mouse interfaces, Windows 8 provides an intuitive and productive way to work.

The improved touch experience helps businesses expand into new working scenarios. Workers will find that the combination of touch, mouse, and keyboard provides an efficient way to interact with a computer. With Windows 8, workers can type, swipe, or click their way through the work day.
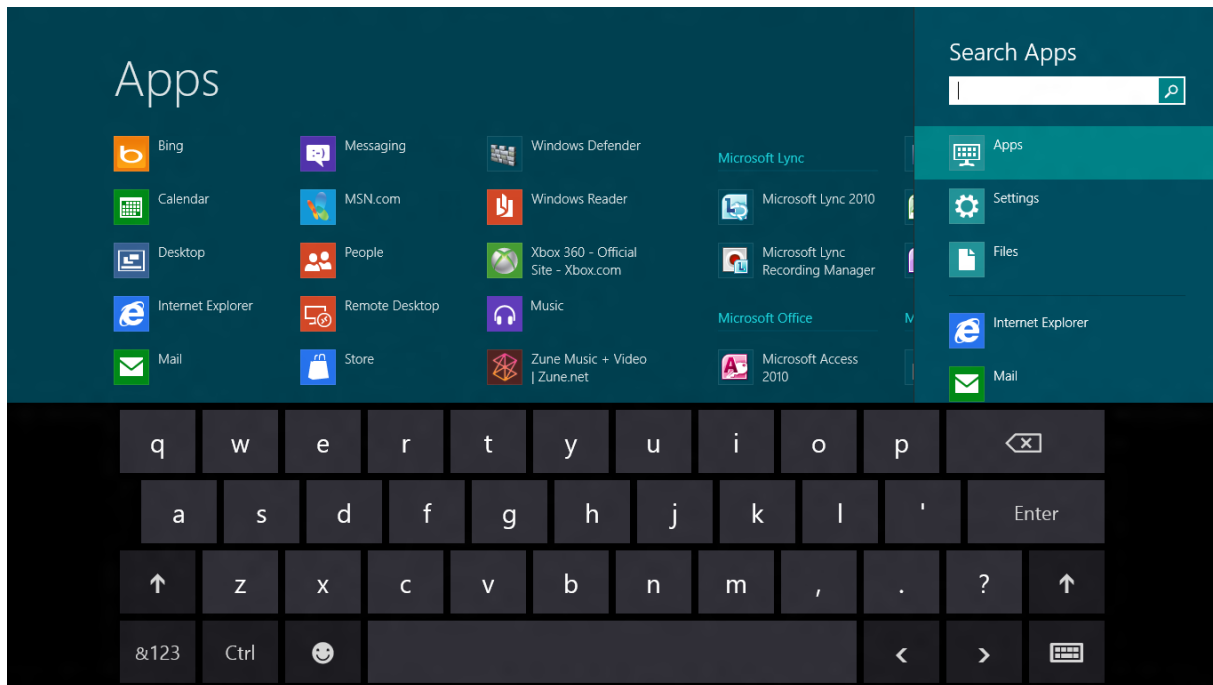

Soft keyboard user interface

Choice in form factors

Windows 8 scales across a variety of device and architecture types, from high-powered 64-bit desktops, to lightweight ARM-based tablets. High performance desktops benefit most from the robust performance and scalability of Windows. Mobile devices such as laptops and tablets benefit most from improved power management features in Windows 8.

32-bit and 64-bit tablet computers that run Windows 8 can also integrate into your existing management infrastructure. These tablets can be managed in the same way as traditional desktops and laptops, so IT professionals can ensure that these devices can easily be added to any business.

ARM-based tablets running Windows 8 are ideal for workers who are constantly on the go and need a long-lasting battery. ARM-based tablets use less power than 32-bit and 64-bit devices and workers can rely on the extended uptime of these devices. Although the ARM-based version of Windows does not include the same manageability features that are in 32-bit and 64-bit versions, businesses can use these power-saving devices in unmanaged environments.

Windows To Go enables alternative workplace scenarios. Offsite temporary workers can be given a Windows To Go drive for the duration of their employment so that no corporate data is stored on their personal device. Remote and work-at-home employees can be issued a Windows To Go drive for regular work done outside of the office. In these scenarios, the Windows To Go drive enables remote worker productivity while helping keep corporate data safe.
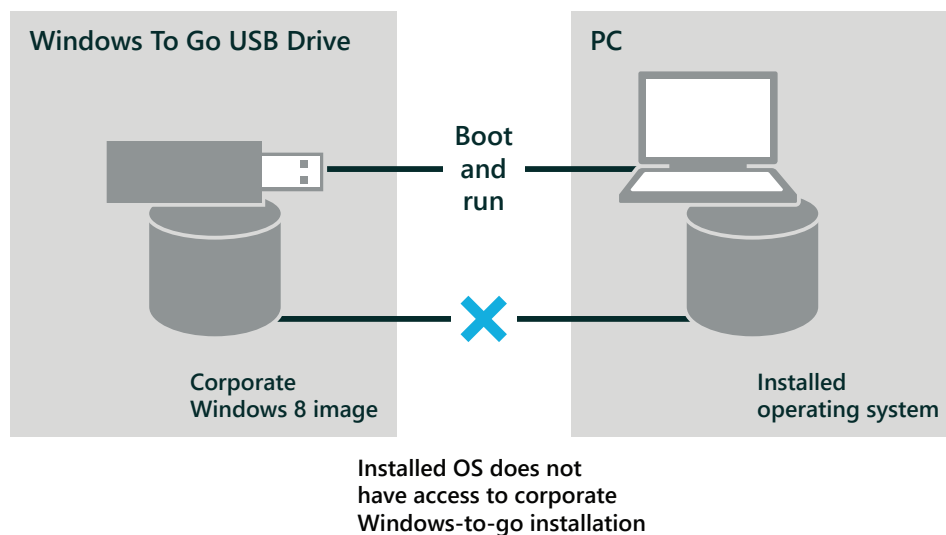
Windows To Go connection

By creating a Windows To Go drive, you can include all of the applications that the employees use at work. When a user boots their PC from the Windows To Go drive, it creates a corporate desktop experience so they can quickly start working. If they have enterprise network access, employees can use a virtual private network (VPN) connection or DirectAccess to access corporate resources. If the enterprise network is available, Windows To Go will automatically be updated by using standard desktop management processes.

Internet Explorer 10

Internet Explorer 10 with Windows 8 is designed with business needs in mind. Internet Explorer provides a new browsing experience for the corporate workforce with Windows touch devices while the desktop version of Internet Explorer allows enterprises to continue using existing line of business applications.

Internet Explorer 10 carries over the advancements made in earlier versions around security and performance. Tools like the industry leading SmartScreen filter continue to help protect corporate customers from socially engineered malware – while hardware acceleration ensures that web applications are fast. And, the investments you've made in your web-based line of business applications carry over to Internet Explorer 10 with little effort because it supports IE9, IE8, IE7, and Quirks compatibility modes.

For touch form factors, Internet Explorer provides a new way to experience the web through touch, fully optimized for your Windows 8 touch device, making it easy for employees to navigate the web and interact with business applications with easy to use gestures.

To help move the web forward, Internet Explorer 10 supports modern standards like HTML5, CSS3 and SVG to give corporate developers the ability to build more powerful web applications. Furthermore the underlying platform is fully interoperable across Internet Explorer and its desktop version, enabling developers to write the same markup for both experiences. Internet Explorer is also plug-in free. Line of business applications that require legacy ActiveX controls will continue to run in the desktop version of Internet Explorer. The desktop version can be easily accessed by tapping on "Use Desktop View" in Internet Explorer.

IT Professionals continue to enjoy extensive management and configuration support in Internet Explorer 10. Internet Explorer 10 can be configured as needed using over 1500 group policies and strong deployment and management capabilities to make Internet Explorer 10 the browser of choice for enterprise.

New possibilities for mobile productivity

With robust connectivity and strong power management options, remote workers and branch offices can stay better connected and access the apps and data they need. For remote and mobile workforces, Windows 8 empowers IT professionals to provide users with more secure access to their personalized work environment when they are working remotely.

Windows 8 help your workers access data wherever they are and keep your business running. Virtualization improves the reliability and scalability your of business, and cloud technologies help keep your data accessible.

Work on the road

With Windows 8, mobile and remote workers can stay better connected and be more productive, while IT professionals can ensure that corporate data is safer and more secure.

Road warriors can take their Windows 8 PCs with them, confident that the built-in Wi-Fi and mobile broadband solutions can help them stay connected whether they're on-site with a customer, waiting for a flight, or working from a branch office.

Windows To Go

Growing mobility and consumerization trends pressure IT professionals to provide users with secure access to a corporate operating system and apps in situations when a device or network is out of the IT department's control. Windows 8 includes the ability to provide users with a full corporate copy of Windows (along with user's business apps, data, and settings) on a USB storage device. When users boot their Windows To Go device into any Windows 8 compatible PC* they get a rich, consistent and personlized Windows environment and it operates as a more secure and fully managed device. When they shut down, they can remove the USB device, and it is ready to use on another PC.

DirectAccess

IT Professionals must ensure that mobile users are productive, connected, and secure. DirectAccess allows remote users to seamlessly access resources inside of a corporate network without having to launch a separate connection to the network, such as a virtual private network (VPN). To use DirectAccess, companies need to use Active Directory Domain Services and Windows Server 8.

DirectAccess can help remote users to seamlessly access internal resources such as line-of-business apps and internal websites. DirectAccess connects client computers to the internal network when the computer connects to the Internet. Administrators can monitor connections and remotely manage client computers that are using DirectAccess to connect to the Internet.

Windows 7 logo or higher

DirectAccess
Connection is established at start time and user does not need to log on
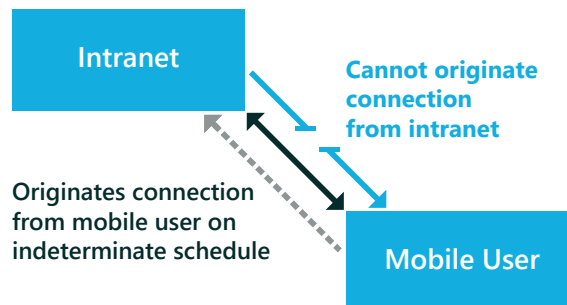

| Intranet | | **Can originate connection from intranet** |

Connection to intranet is always active

Mobile User
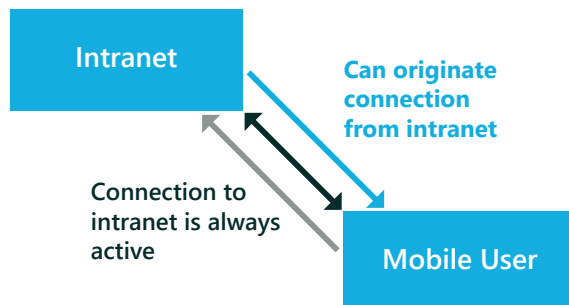
Virtual Private Network
Connection is not always established

Intranet

Cannot originate connection from intranet

Originates connection from mobile user on indeterminate schedule

Mobile User

DirectAccess and Virtual Private Network comparison

In standard VPN connection scenarios, users must connect to the corporate intranet through a VPN client. Users must start the VPN client, and remote computers can't be accessed by business servers unless this connection is established. Updates or other notifications cannot be pushed from the corporate intranet to mobile users unless this connection is started by the mobile user. DirectAccess eliminates the need for users to manually sign in to the corporate network with a VPN client.

Mobile broadband
With Windows 8, it is easier to get connected and stay connected.

Built-in mobile broadband features in Windows 8 natively supports 3G and 4G telecommunication, which enables mobile workers to get connected to the Internet immediately. Windows 8 mobile broadband support can help businesses keep data usage costs low with built-in mobile broadband metering. Users can easily see the data they are consuming, giving them an opportunity to budget in advance for overages. As mobile workers move between locations, Windows 8 automatically uses Wi-Fi hotspots if they're available. This saves costs and improves bandwidth.

Work in a branch office

Branch offices can take advantage of improved features that help keep remote workers connected to headquarters.

BranchCache
BranchCache regularly caches files, websites, and other content from headquarters, and then client computers in remote locations can access the content locally, rather than

repeatedly downloading it across the wide area network (WAN). By using BranchCache, you can reduce WAN use and the time that is required for remote workers to open files on the network in addition to helping protect the security of your content. Applications that use networking protocols are more responsive and users in remote offices can experience higher performance on their local area network.

data **Headquarters**
Wide area network

Cached data

Local area network

Branch Office
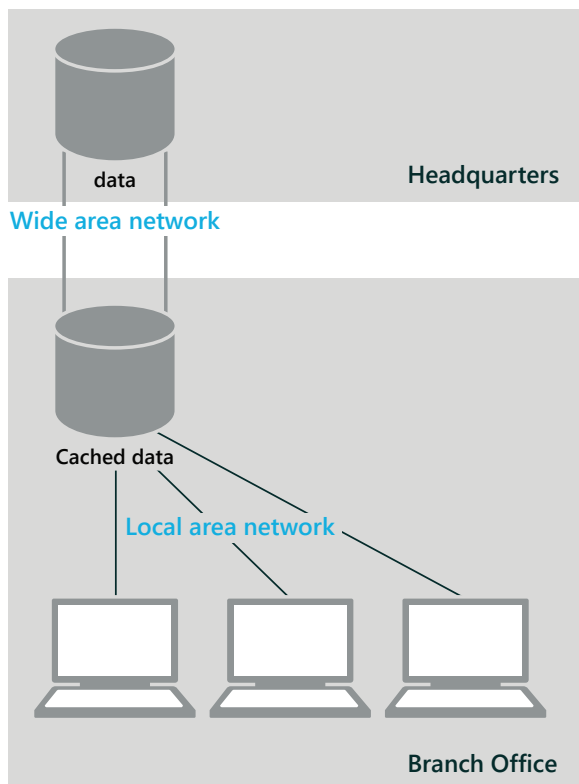
BranchCache Data Cache

Improvements to BranchCache streamline the deployment process and optimize bandwidth over WAN connections between content servers and remote client computers. Remote client computers can access data and run applications in a more secure, efficient, and scalable way. Performance is improved by reducing data transfer size requirements through cache encryption, using data de-duplication, and minimizing cache block sizes. BranchCache can scale to offices of any size by allowing you to deploy as many hosted cache servers as needed at a location. New database technologies ensure that BranchCache is faster and more scalable.

Printing enhancements

With print server enhancements, printing scenarios are simplified. Hyper-V® and failover clusters of print servers increase the scalability, availability, and reliability of printing services, and reduce administration costs. IT pros can use Hyper-V and failover clusters of print servers to remove the need for special drivers. If one of the virtualized print servers fails, another automatically starts. In the event of a hardware failure, the virtual print server restarts on

the next Hyper-V server in the cluster. Print jobs that are sent from client computers running Windows 8 to a printer that is shared on a server running Windows Server 8 go directly to the local branch office printer. Print jobs do not have to first travel over the network to the remote print server.

Administrators no longer need to load different driver packages onto the print server for different client computer architectures. In addition, when the print server is running Windows Server 8, clients running Windows 8 don't need to download a driver to use a printer that works with the Windows Server 8 print driver model.

Cloud-connected

When you sign in to your Windows PC, your device is instantly connected to the people, files and settings you care about. Sign in, and your PC running Window 8 PC is instantly alive with the things that make Windows yours: your Start page, themes, language preferences and browser favorites. Restoring a user's Windows settings is now much easier should a user need to recover their PC. After resetting a PC, their settings are restored and apps can easily be downloaded by signing in with a Microsoft account.

For small businesses, accessing and sharing data in the cloud is easy with SkyDrive®. Providing a simple, easy-to-use cloud storage solution, SkyDrive files can be made private or public and you can also allow access only to specific people. And services such as Hotmail® and Messenger provide reliable communication services for connecting with friends and family.

Enterprise-class infrastructure technologies

Windows 8 works well with today's hardware options. Combined with tools that simplify compatibility testing and deployment, Windows 8 easily integrates into most existing client management infrastructures.

If your business is running previous versions of Windows Server, Windows 8 can easily be managed alongside your other Windows client PCs.

Enhanced end-to-end security features

From power-on to power-off, Windows 8 offers features that improve the security and reliability of the systems in your organization. From power-on to power-off, Windows 8 provides a more secure foundation to help keep your businesses running.

Trusted boot process

The Windows 8 boot process is signed and measured, helping to protect the PC from malware or viruses.

Secure Boot validates the integrity of the entire boot process, including the hardware, boot loader, kernel, boot-related system files, and drivers. Antimalware is loaded in advance of all non-critical Windows components. This means that malware, such as rootkits, are less able to hijack the boot process, or hide from antimalware software.

On appropriately configured platforms supporting the UEFI 2.3.1, firmware authenticates Windows boot components to help prevent any attempt to start malware before the operating system is up and running. If a component is not correctly signed by Microsoft, the operating system starts the Windows Recovery Environment (Windows RE) to automatically reinstall properly signed operating system components.

Measured boot process

On Trusted Platform Module (TPM)-based systems, Windows 8 can perform a comprehensive chain of measurements during the boot process that can be used to further validate the boot process beyond Secure Boot. Measured boot process enables all aspects of the boot process to be measured, signed, and stored in a Trusted Platform Module (TPM) chip. This information can be evaluated by a remote service to further validate a computer's integrity. This process is called attestation.

With strong checks to ensure that operating system components are kept safe, malware and other types of malicious software have much less of a chance taking over a PC than ever before.

BitLocker Drive Encryption

BitLocker® drive encryption helps protect corporate data on mobile PCs that include a Trusted Platform Module (TPM) chip. BitLocker now encrypts hard drives more quickly, helping to keep data safe without significantly interrupting worker productivity.

BitLocker supports Encrypted Hard Disk Drives (EHDD), which are hard drives with hardware-based encryption that come pre-encrypted from the manufacturer. BitLocker offloads the cryptographic operations to hardware, increasing overall encryption performance and decreasing CPU and power consumption.

Because Bitlocker encrypts data quickly, enterprise clients can expand BitLocker deployment with minimal down-time. BitLocker allows you to choose to only encrypt the used space on a disk instead of the entire disk. As free space is used, it will be encrypted. This results in a faster, less disrupting encryption of a hard disk. In addition, the user experience is improved by allowing a standard user, one without administrative privileges, to reset the BitLocker PIN.

AppLocker

Sensitive data is an asset and this information must be controlled and managed. Access control technologies such as Active Directory Rights Management Services and access control lists (ACLs) help control the data users are allowed to access. However, when a user

runs a process, that process uses the same level of access to data that the user has. As a result, sensitive information can easily be deleted or transmitted out of the organization because a user knowingly or unknowingly ran malicious software. AppLocker can help mitigate these types of attacks by restricting the files that users or groups are allowed to run. By creating security policies, IT pros can use AppLocker to choose which apps can run. Businesses can select which users or groups can run which apps, ensuring that the right users have access to the right applications.

AppLocker is ideal for businesses that currently use Group Policy to manage their Windows-based computers.

SmartScreen® Application Reputation Service

SmartScreen® Application Reputation is a new opt-in safety feature in Windows 8. Application Reputation has been designed expressly to help consumers make better trust decisions when a downloaded application is more likely to be unsafe. When a Windows 8 user runs an application downloaded from the Internet, SmartScreen uses reputation data to remove unnecessary warnings for well-known files and to show warnings when the download is at higher risk of being malicious. For most Windows consumers, downloaded programs without established reputation—especially those that are not digitally signed—are more likely to be unsafe.

Claim-based access control

With Windows Server 8, businesses can maintain dynamic, organization-based application policies for files, folders, and shared resources. Claim-based access control enables you to set up and manage usage policies for specific data. It helps protect sensitive data, and it can ensure that those who are accessing the data and the systems they are using are trusted.

With claim-based access control, sensitive data is only available to those who should have access to that data. For example, individuals in the finance group can have access to specific budget and forecast data, and the human resources group can have access to personnel files. Claim-based access control is based on configurable criteria, such as user roles, departments, country, the sensitivity of the data being accessed, and the health of the device that is used to access that data.

Unified management across devices

Many of the client management solutions that are included with Windows 7 are also included with Windows 8. With new device form factors and more mobile devices entering the workplace, managing devices and corporate data is more critical than ever. The trusted management and security features that millions of businesses depend on every day are a part of Windows 8.

Testing, deployment, & migration

Deploying Windows 8 in your organization is faster and easier. Enhanced tools help IT pros make the right decisions with minimal downtime for users. A new version of the Application Compatibility Toolkit (ACT) helps enterprise organizations to test and mitigate potential application compatibility issues before rolling out a new version of Windows.

Migrating user data from a previous Windows installation can be automated with the User State Migration Tool (USMT). This tool now supports migrating user data from Windows XP installations. With the end of support for Windows XP on the horizon, now is a great time to plan your migration to Windows 8.

Hyper-V

Hyper-V on Windows 8 is a flexible, robust, and high-performing client virtualization technology that enables enterprise developers to develop, debug, and test multiple configurations of apps and operating systems on a single PC instead of each configuration requiring its own PC. On editions of Windows 8 that support Hyper-V, IT professionals can test and manage multiple environments from a single PC, perform application compatibility tests, or test without risking changes to a PC that is actively in use. Hyper-V supports both 32-bit and 64-bit versions of Windows, and IT professionals can manage their client virtual machines seamlessly. Running Hyper-V on Windows 8 computers lowers costs by consolidating hardware and improving efficiency through virtual machine compatibility with Hyper-V on Windows Server 8.

With Hyper-V, multiple operating system configurations are easy to build, maintain, and reuse.

New Virtual Hard Disk format

An update to the VHD format, called .vhdx, has much larger capacity and built-in resiliency. VHDX supports up to 16 terabytes of storage. It also provides built-in protection from corruption that can occur during power failures and it helps prevent performance degradation on some large-sector physical disks.

Assessments

Building fast Windows 8 clients, optimized for your organization's workloads is easy with the Windows Assessment Toolkit. By using these tools, you can review different performance characteristics of the Windows images and hardware you are deploying in your organization. You can review startup and shutdown times, energy efficiency, Windows Internet Explorer® performance, and other scenarios. The results of these assessments are used to diagnose potential problems, ensuring that the images you design and the software that you develop are high performing.

In addition to the Windows Assessment Toolkit, the Windows Performance Toolkit lets you track detailed system information and resource usage. This tool displays real-time data and diagnostics quickly and easily, ensuring that you have a complete view of the system to help you tune performance of specific line-of-business apps or specific images for your organization.

Reset and refresh your PC

Users can easily reset or refresh a Windows installation and get problematic or corrupted systems up and running again. Even if the PC cannot start, you can launch the Windows Recovery Environment and reset the installation to its original state. These features give IT professionals flexibility in restoring PCs in the event of serious hardware or software issues.

Users have the ability to reinstall Windows while maintaining all the users' personal files, accounts, and personalization settings. Additionally, users can reset everything on their PC back to factory condition.

Push-button reset provides a flexible solution to help recover a problematic or corrupted PC.

Remote Desktop Services

Connecting to remote computers is easier and more secure with Remote Desktop Services (RDS). RDS allows multiple people to concurrently log into a shared server and work in an isolated session. RDS creates a more secure workplace by keeping sensitive data in the data center while allowing multiple users to work simultaneously. RDS makes it possible to run the latest operating systems on older or less powerful devices, such as thin clients. For users, remote desktops behave more like a traditional desktop, whether connected across a LAN or WAN. Administration of RDS is easier and it is less expensive to deploy. RDS features work consistently for both session virtualization and Virtual Desktop Infrastructure (VDI).

Automation with Windows PowerShell

Management tasks are easier than ever in with Windows PowerShell® automation. Windows PowerShell provides an easy-to-learn language syntax. New features in the Windows PowerShell Integrated Scripting Environment (ISE) make it easier and faster for both new and experienced users to author clear, maintainable, production-ready automation scripts. Improved cmdlet discovery makes it easier to find and run any of the 1,200 new high-level, task-oriented cmdlets.

Summary

Windows 8 provides a great opportunity for businesses to empower their workforce. With new and improved features that support working remotely, ease-of-management for administrators, and a natural and inviting user interface, Windows 8 can help your employees be more productive and help keep your data more secure.