

WHITE PAPER

Windows 8

In Plain English



gov is all you need™

GovConnection[®]
A PC CONNECTION COMPANY

Windows 7 was released in the fall of 2009 to great fanfare. Many hailed it as “the next XP” and made plans to deploy the new version within the first 18 months of its release. Since then, Windows 7 has overtaken XP as the most popular desktop operating system in the world. Finally, users had a modern OS to replace the solid, yet antiquated XP.

Even though it is only three years later, Windows 8 almost appears to come on the heels of Windows 7. Many customers are asking, “Why now?” With most users seemingly content to run Windows 7 for the foreseeable future, what does Windows 8 offer above and beyond Windows 7? In this whitepaper, we will discuss what is new with Windows 8 and why it may, or may not, be a good fit for your organization.

If you are an organization that is engaging in desktop transformational activities, where data and applications are driving your environment, then Windows 8 is the next logical step. This new OS is a response to new trends in the rapidly evolving IT landscape like Bring Your Own Device (BYOD), Virtual Desktop Infrastructure (VDI), and mobility. Enhancements to the OS technology as well as the licensing terms are designed to modernize the platform and better conform to your current IT goals.

AMAZING NEW HARDWARE CHOICES

Windows 8 brings you the power of choice and a device to match any workstyle. Touch, keyboard, and mouse control is integrated in many of the new tablets that come with Windows 8. Ultrabooks and notebooks are thinner, lighter, and faster than ever before, and they now come with a battery life that far exceeds expectations. Windows 8 also offers better security and compelling connectivity with mobile broadband and Wi-Fi. Windows 8 delivers the fun of a tablet and the productivity of a PC. And all Windows 8 devices, even tablets, have USB ports. You’ll get the best of both worlds—devices for work and play—with a wide range of hardware to match any user’s style.

PURCHASING OPTIONS

Most business users will purchase Windows 8 Pro via OEM or volume licensing. It is important to note that all Windows 8 volume licensing is considered to be upgrade licensing. Therefore, Microsoft is assuming that the machine for which you are purchasing the volume license already has an operating system installed. It is unlawful to install a Windows 8 Pro upgrade license on a white box, DOS, or Linux box. These operating systems do not qualify as upgradable. A Windows 8 upgrade license may only be applied to an existing Windows volume license (not Windows Starter or Home) or Mac.

ADDED VALUE

BitLocker is now included in the Pro edition of Windows 8. A deployment of BitLocker for previous versions, like Vista and Windows 7, required an investment in Software Assurance (SA). With version 8 this is no longer the case. However, adding SA to your Windows 8 upgrade license purchase may still be a sound investment. SA is the only way to acquire the Enterprise edition of the OS.

One of the new features of Windows 8 Enterprise is Windows To Go—a feature specifically designed to support BYOD. With Windows To Go, users can keep their desktop on a bootable external USB drive. This is a full version of Windows 8, and initial feedback is that it works well. The contents of the USB can be secured with BitLocker to protect your data if the USB is lost or stolen. Also, as with Virtual Desktop Access (VDA), Windows Roaming Rights are extended to Windows To Go. This allows you to access Windows To Go from a home computer without purchasing a separate license. The only catch is that Windows To Go will only work on hardware that is already capable of running Windows 8.

Along with Windows To Go, there are several other features of the Enterprise edition that are not included in the Pro edition. Here is a complete list:



For more detailed information about the new release of Windows 8, please contact your Account Manager today. 1.800.800.0019

Licensing Overview

WINDOWS 8 EDITIONS

OEM Licensing (pre-installed on hardware):

- Windows 8 RT
- Windows 8
- Windows 8 Pro

Boxed Retail Product:

- Windows 8
- Windows 8 Pro

Volume Licensing

- Windows 8 Pro (upgrade license)
- Windows 8 Enterprise (available only with SA)

- **Windows To Go:** A fully manageable corporate Windows 8 desktop accessible via a bootable external USB drive.
- **DirectAccess:** This feature allows remote users to access resources inside a corporate network seamlessly and without having to launch a separate VPN. It helps IT administrators keep remote users' PCs in compliance by applying the latest policies and software updates. It is easier to deploy and can be implemented with the existing IPv4 infrastructure.
- **BranchCache:** This feature allows users' PCs to cache files, websites, and other content from central servers—so that content is not repeatedly downloaded across the wide area network (WAN). When used with Windows Server 2012, BranchCache streamlines the deployment process, optimizes bandwidth over WAN connections, and ensures better security and scalability.
- **AppLocker:** This feature restricts the files and apps that users or groups are allowed to run.
- **VDI Improvements:** Enhancements in Microsoft RemoteFX and Windows Server 2012 provide users with a rich desktop experience and the ability to play 3D graphics, use USB peripherals, and use touch-enabled devices across any type of network (LAN or WAN) for VDI scenarios.

DOWNGRADE RIGHTS

Many users are not ready to make the switch to Windows 8. Here are a few things to keep in mind if you plan to deploy any prior version of Windows:

- If you purchase a new device with Windows 8 installed on it (OEM license) you only have the rights to downgrade to Windows 7 or Vista; you cannot downgrade to XP.
- A Windows 8 volume license may be downgraded to any previous version, including XP. However, you may not see XP on your list of downloads in the Volume

License Service Center (VLSC). To acquire the XP download and activation keys, you must call 866-230-0560 and speak directly with the VLSC helpline.

- The retail box product may not be downgraded to any prior version of the software.

MORE FLEXIBILITY FOR BYOD AND VDI

Microsoft acknowledges the trend towards BYOD and is making changes to help users cope with some of the challenges, including VDI. In a VDI environment, users typically access their virtual desktop from several different devices. In the past, Microsoft had required a VDA subscription for each corporate-owned device that was accessing a virtual desktop—regardless of whether it was a primary or secondary device. As you might expect, this caused some consternation in the marketplace. Microsoft has addressed this obstacle with a new licensing model for companion devices.

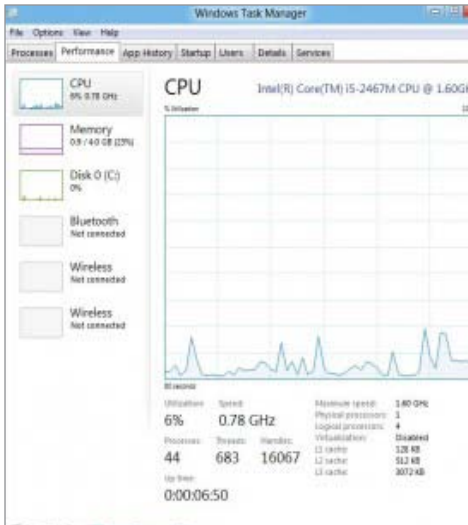
With the licensing new model, if a user has a virtual desktop, Microsoft has created a Windows Companion Subscription License (CSL). The Windows CSL is an optional add-on subscription that grants the primary user of a licensed device the right to access a corporate desktop via VDI or Windows To Go—on up to four corporate-owned devices capable of leveraging these technologies. This is applicable to notebooks, tablets, and other mobile devices. Non-corporate-owned devices, such as home computers and Internet kiosks, are already covered by VDA roaming rights. A CSL is only required when the secondary devices are issued by the licensing company or organization. However, if the companion device is a Windows RT device, i.e. a Windows 8 tablet, VDA rights will automatically be extended to that device; no additional Windows CSL is required.

ADDITIONAL NEW TECHNOLOGY FEATURES

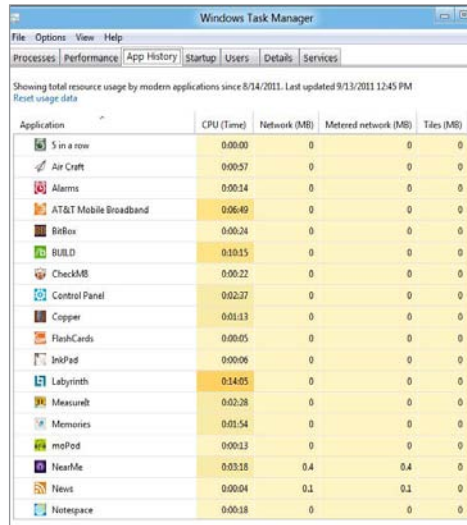
- **Trusted Boot and Measured Boot:** Windows 8 favors hibernate over shut down. Shut down will occur when there are



For more detailed information about the new release of Windows 8, please contact your Account Manager today. 1.800.800.0019



Windows Task Manager: Performance



Windows Task Manager: App History



For more detailed information about the new release of Windows 8, please contact your Account Manager today. 1.800.800.0019

new software updates or installs. Generally speaking, when you stop and start using the new operating system, it will go into hibernation and not shut down entirely. This makes boot times appear much faster than previous versions.

- **Mobile Broadband:** To allow for greater mobility, Windows 8 includes fully developed and integrated mobile broadband.
- **Refresh and Restore:** This makes it easier to reset a computer to a known state, either OEM or standard corporate image.
- **Client Hyper-V:** Full hypervisor from Windows Server is now available for users
- **Remote Desktop:** This feature allows you to create a remote connection between computers over the Internet. Users will be able to manipulate the mouse and keyboard on a primary machine from a remote computer while showing you everything that is happening on that screen.
- **Enhanced User Interface:** Windows 8 features a new Start screen with Live Tiles. However, you may choose to run Windows 8 with a more familiar desktop and task bar interface.
- **New Windows Explorer Experience:** Functions such as copying, moving, renaming, and deleting files will become much easier. A new logical user interface

for Explorer gives the user more control over the operations process.

- **Enhanced Task Manager:** Windows 8 Task Manager provides far more information than previous versions. Below are some examples.

Feature	Requirement	
	x86 (32-bit)	x64 (64-bit)
Processors	1GHz	1GHz
RAM	1GB RAM	2GB RAM
Available Disk Space	16GB Available disk space	20GB Available disk space
Hyper-V	(Not Supported)	X64 processor with SLAT support 4GB of RAM
Touch Input	Multitouch	
Sensors	3D Accelerometer 3D Gyrometer Magnetometer	
Monitors	16:9 Aspect Ratio 1024X768 Resolution	
I/O	USB 3.0	
Graphics	DirectX 9 Windows Display Driver Model (WDDM) 1.0	
Fast, Secure Boot	Unified Extensible Firmware Interface	

HARDWARE REQUIREMENTS

Most computers today should have sufficient RAM to run Windows 8 due to a reduction in memory requirements and the number of OS processes. Some differences worth pointing out between Windows 8 and 7 are: greater monitor resolution, aspect ratio, and multi-touch support for new Metro applications. Requirements listed in the table above are minimum, not optimal, requirements.