

## **Windows 7 - What You Need to Know.**



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## What is Windows 7?

After almost 3 years on the market, Windows Vista is being replaced by Windows 7 as the newest operating system in Microsoft's desktop line-up. It's no secret that Vista wasn't quite the success Microsoft were hoping for, with many companies choosing to stick with Windows XP as it was "good enough" but building on Vista and the lessons learnt from it, Windows 7 is being acclaimed as Microsoft coming back stronger than ever and delivering a secure, fast and compatible operating system for users everywhere.

## Why Upgrade?

As said earlier, a large number of businesses avoided upgrading to Windows Vista as they saw Windows XP as "good enough". It ran all required company programs and was compatible with existing equipment like printers, scanners and webcams so why should they risk upgrading to a new, untested operating system?. Windows Vista has been available for about 3 years now, after 2 service-pack updates and with companies like Canon and HP updating their software to work within Vista's new secure environment, things are much smoother with fewer compatibility issues when upgrading. Windows 7 uses the same secure environment as Vista so all drivers and programs which run on Vista will run on Windows 7 without issues. It also brings new features focused on security, speed and ease of use which will make huge changes in the way you use your computer.

## 'BitLocker to Go' – Mobile Data Security

Almost everyone will have heard about someone who has lost important data on a USB or laptop – it seems governments across the world have given plenty of case studies for lax security. Data is everywhere, and the ease of losing a drive the size of a pack of chewing gum containing confidential documents is something all organizations should be concerned about.

With Vista, Microsoft introduced a new technology called BitLocker which encrypts the entire contents of the hard drive within your laptop or desktop machine. This made it impossible for anyone to read the information on the drive by simply removing it and plugging it into another machine. In Windows 7, Microsoft has extended the capability of BitLocker by enabling it to encrypt USB drives using 'BitLocker to Go'. Any drive encrypted with BitLocker to Go will only be readable once a password is given. If you always use the same USB drive on your computer you can tell Windows to remember the password so it won't bother you again for that machine.

## End-User Control of Installing Desktop Applications - AppLocker

Managing users' access to their machine can be rather

difficult. On the one hand, restricting their access prevents them from installing programs which can not only be distracting from work but can sometimes contain viruses, Trojans and other malicious software. On the other hand, this stops them from installing programs they may genuinely need which are known to be free of spyware and other computer bugs.

AppLocker is a new feature in Windows 7 which allows administrators to designate a list of allowed applications for client machines. Unlike previous technologies designed to do the same thing, AppLocker can create different rules based on the publisher (e.g. Adobe or Symantec), program (e.g. Flash Player or Acrobat Reader), version or even file location. The benefits of this allow administrators to create rules which will allow users to install Adobe PDF reader when a new version is released. This saves administrators from having to create new rules for each software version, and still allows them to lock down users machines to prevent unwanted programs on the network.

## Remote Data Access - BranchCache

With many organisations having multiple branch offices, managing data storage and network traffic across slow site links can cause serious problems. For those organisations with a central office where all the servers and data are stored there is the problem that each time a user in a branch office accesses a shared file, they need to retrieve the file from the head office server and save it back there when changes are made.

Windows 7 introduces a new feature called BranchCache which reduces site link traffic and speeds up file access for users in branch offices. When a user in a branch office accesses a file from the head office, the file is downloaded to their machine and stored in a "BranchCache" on their machine. Any subsequent users in the same branch office who try to access the file will, instead of re-downloading the file from the head office, download the copy from the machine which accessed it previously. This saves on network speed across site links which can be slow but also keeps the documents up to date and replicates any changes made in other branch offices.

## Problem Solving Assistance – The Problem Steps Recorder

One of the first things an IT person will ask you to do when you call in for help is to recreate the problem for them to see. Whether it's an error message which pops up when Outlook opens or the company intranet not loading properly, it helps if we see what steps happen to create the problem so we can then try to pinpoint the cause.

Windows 7 has a new program called The Problem Steps Recorder which allows users to record how to make the problem occur and save the steps as a small file which

can then be emailed to the helpdesk. This file contains screenshots of the windows, where the mouse is clicked and any error messages which appear allowing IT support to begin resolving the problem before they even call the user back.

### **Speed – Nearly up to XP Levels**

Thankfully Microsoft have managed to make Windows 7 run faster than Vista. In speed tests on the same hardware, Windows XP comes out top, Windows 7 slightly behind and Vista coming in slowest. Considering that Windows 7 is much more secure and modern than XP, having it almost match the speed of XP which was developed to run on machines a decade ago is not something to be taken lightly. This also means that Windows 7 will run quite happily on any machines which were Vista compatible. Obviously, the faster the machine is the better experience you will have, but Windows 7's recommended minimum specs of 1GB memory and 1Ghz processor deliver performance which anyone would be comfortable with.

### **Improved Interface**

The taskbar in Windows has stayed the same since its initial release with Windows '95. Vista gave it a see-through makeover but it still behaved the same way with programs, the notification area by the clock and the Quick Launch area with shortcuts to common programs.

Windows 7 introduces a new style taskbar which combines the Quick Launch shortcuts with running programs allowing you to quickly launch programs and common tasks using 'Jump Lists'. Programs are automatically grouped together, showing all open windows by hovering over the icon in the taskbar which keeps the interface clean

and windows easily accessible.

Aero, the glass style user interface first introduced in Vista has also had a few changes, you can now snap windows to the top or sides of your display and they will automatically maximize to fill the screen or half the screen allowing you to easily compare 2 folders or files. Grab hold of and shake a window and all other windows minimize to the taskbar and hover the mouse over the small button to the right of the clock and all open windows will go see through, allowing you to see the contents of your desktop. These sound like gimmicky additions but you'll be surprised how often you use them!

### **So it's all good news?**

Mostly, yes if you use Vista. Windows 7 can crudely be seen as a major refinement of Vista, so has had 3 years of testing and troubleshooting to reach the point it is at today. There is a slight learning curve with the new interface and a few new ways of doing familiar things but all in all, Windows 7 achieves its design goal of being the most secure, easy to use and business friendly Windows operating system yet.

### **What are we waiting for then?**

As with anything on the network, it is always good practice to thoroughly test compatibility with any programs or hardware. Although initial testing of Windows 7 has shown it to be compatible with most existing networks, there will undoubtedly be teething problems. Windows 7 will begin shipping with new machines on the 22nd of October, 2009 but Windows XP will continue to be available as an option into 2011 which gives organisations plenty of time to transition over.

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