

WINDOWS 7: A BEGINNER'S GUIDE



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The Windows Club

This book is for people who are new to Windows 7. I have tried to make it simple so that anyone without prior knowledge of computers will be able to understand this book from beginning till the end.

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A BRIEF HISTORY

Windows 7 or Blackcomb as it was called during the time was supposed to be the successor of Microsoft Windows XP. It was a prestigious project for Microsoft and tended to change the way the common man computed. Emphasis was given on searching and “interpreting” the search intelligently. To do that a new file system called WinFS was also planned and the product was supposed to be launched by 2005. But Microsoft later changed the plans and included an interim build between the release of Blackcomb called Longhorn and planned to launch it by 2003. Within few months Microsoft added many of the features that were supposed to release with Blackcomb to Longhorn including WinFS.

But during 2003, within a short time frame, Windows PCs faced 3 major attacks by viruses named Blaster, Sobig and Walchia and were later known as “Summer of Worms”. Due to these attacks Microsoft decided to give more priority for developing new service packs for Windows XP and Server 2003. The entire project had to be rebooted once again during 2004 which even more delayed the release of Longhorn. Longhorn was finally released under the name of Windows Vista on December 2006 for business and 30, January 2007 for retail. Many of the features including WinFS were dropped and the final product received lots of criticisms and was said to be “half baked”.

During the release of Windows Vista the code name of Blackcomb was changed to Vienna and then to Windows 7 by 2007. In 2008 it was announced that Windows 7 will be its official name. A beta version of the OS was released on January 9, 2009 and release candidate on May 5, 2009. The final version or the RTM (release to manufacture) is slated to ship by October 22, 2009 for retail. Unlike Windows Vista which received criticisms Windows 7

received some very good positive reviews and was said to be “the Vista done right”. Start up and shut down times were said to be faster than Vista and XP. The aero interface that introduced with Vista was refurbished in Windows 7 and many features were added and a few removed too. These included Windows Mail, Movie Maker, and Windows Calendar etc that debuted with Vista. The reason given was that these apps needed much more frequent updates than the core operating system itself. These apps have been packed together as Windows Live Essentials and are available for download from the Windows Live website.

CHOOSING THE RIGHT VERSION

With Windows Vista choosing a version was not easy. There were lots of versions and features were scattered across those versions. So if you move from Home Premium to Business you could end up losing some features such as DVD Maker and Media Center.

Choosing a version of Windows 7 is much easier. Basically there are 6 editions of Windows 7 – the starter edition, Home Basic, Home Premium, Professional, Enterprise and Ultimate. Unlike Vista, each Windows 7 editions are a superset of the one before it. So you won't end up losing features when you move from one version to the other. Now let us dig a little deeper into these SKUs.

Starter - Starter is designed especially for the small size notebooks or netbooks. It is the most basic edition of Windows 7 and misses most of the eye-candy and advanced features. Still it is more than enough for people who want to just check their mails and do very little stuff with their computer. The new features in Starter are Action Center, Libraries, ability to join Home Group etc. Previously it was decided to restrict the number of programs that can be simultaneously opened to just three, like Vista Starter but later dropped that idea due to customer complaint. But the Starter does include some ridiculous restrictions like the inability to change the default wallpaper and there is no personalization option in the right click menu. Starter is only available with OEM hardware.

Home Basic – Home Basic is a special edition which will be available in emerging markets and comes preinstalled in value PCs. It is not available for retail sales and like Starter lacks most of the features.

Home Premium – Home premium is the mainstream version of Windows 7 intended for home users. It has all the visual effects like the new aero effects and aero themes. Home premium also has all the security features of Windows 7. Like Vista Home Premium, it comes with Windows Media center and DVD maker. Other key features are Windows Media Player Remote Media Experience, MPEG-2 decoding, Dolby Digital compatibility, AAC and H.264 decoding, DVD playback and the ability to create and join Home Group.

Professional – Professional edition is mainly for enthusiasts and IT Professionals. Professional edition has all the features of Windows 7 Home Premium plus features for power users. The key features of the Professional edition are Windows XP mode (have to download separately), Remote Desktop host, ability to join domains, network-based backup, EFS and Offline Folders. Unlike Vista Business, media features are also included.

Enterprise – Enterprise edition is available only for Microsoft volume licensing customers. It includes all the features of Windows 7. Key features of the Enterprise edition are BitLocker, BitLocker To Go, AppLocker, Direct Access, BranchCache, MUI language packs and booting from VHD.

Ultimate – Ultimate edition is basically the Enterprise edition itself as it has all the features of Enterprise edition. But it is available for retail customers. The Windows 7 Ultimate edition **DOESN'T** include the “Ultimate Extras” that was available for Vista Ultimate Customers.

Even if there are 6 variants of Windows 7, retail customers are restricted to just three editions, thus making a choice is much easier. Those who use their computer as an entertainment hub can use the Home Premium edition and business users can go for the

Professional version. Ultimate edition is there for people who want everything.

The below table summarizes Windows 7 editions and features available.

	Starter	Home Basic	Home Premium	Professional	Enterprise	Ultimate
Features	OEM licensing	Emerging markets	Retail and OEM licensing		Volume licensing	Retail and OEM licensing
32-bit and 64-bit versions	32-bit only	Both	Both	Both	Both	Both
Maximum physical memory (64-bit mode)	N/A	8 GB	16 GB	192 GB	192 GB	192 GB
Maximum physical CPU supported	1	1	1	2	2	2
Home Group (create and join)	Join only	Join only	Yes	Yes	Yes	Yes
Backup and Restore Center	Cannot back up to network	Cannot back up to network	Cannot back up to network	Yes	Yes	Yes
Multiple monitors	No	Yes	Yes	Yes	Yes	Yes
Fast user switching	No	Yes	Yes	Yes	Yes	Yes
Desktop Wallpaper Changeable	No	Yes	Yes	Yes	Yes	Yes

Features	Starter	Home Basic	Home Premium	Professional	Enterprise	Ultimate
Desktop Window Manager	No	Yes	Yes	Yes	Yes	Yes
Windows Mobility Center	No	Yes	Yes	Yes	Yes	Yes
Windows Aero	No	Partial	Yes	Yes	Yes	Yes
Multi Touch	No	No	Yes	Yes	Yes	Yes
Premium Games Included	No	No	Yes	Yes	No	Yes
Windows Media Center	No	No	Yes	Yes	Yes	Yes
Windows Media Player Remote Media Experience	No	No	Yes	Yes	Yes	Yes
Encrypting File System	No	No	No	Yes	Yes	Yes
Location Aware Printing	No	No	No	Yes	Yes	Yes
Remote Desktop Host	No	No	No	Yes	Yes	Yes
Presentation Mode	No	No	No	Yes	Yes	Yes
Windows Server domain joining	No	No	No	Yes	Yes	Yes

Features	Starter	Home Basic	Home Premium	Professional	Enterprise	Ultimate
Windows XP Mode	No	No	No	Yes	Yes	Yes
Aero glass remoting	No	No	No	No	Yes	Yes
AppLocker	No	No	No	No	Yes	Yes
BitLocker Drive Encryption	No	No	No	No	Yes	Yes
BranchCache Distributed Cache	No	No	No	No	Yes	Yes
DirectAccess	No	No	No	No	Yes	Yes
Subsystem for Unix-based Applications	No	No	No	No	Yes	Yes
Multilingual User Interface Pack	No	No	No	No	Yes	Yes
Virtual Hard Disk Booting	No	No	No	No	Yes	Yes
Source : Wikipedia						

INSTALLATION AND UPGRADE

There are various ways in which you can get your hands on Windows 7. They are

- 1) With a new PC. This is the easiest method.
- 2) By Upgrade Option Program. When you buy a PC with a qualifying version of Windows Vista (Home Premium, Business, and Ultimate) from a participating PC maker you will be eligible to get a copy of the corresponding Windows 7 operating system absolutely free. This offer is for a limited period from June 26, 2009 to January 31, 2010.
- 3) By Retail. You can buy a full version or Upgrade version of Windows 7 from a retail shop. Full version costs more and is used to do a clean installation whereas an upgrade copy requires you to have a previous version already installed on your computer and it is less expensive.

First of all make sure that your system can run Window 7. Microsoft has released a Windows 7 Upgrade advisor that analyzes your computer and tells you whether your computer is capable of running Windows7. You can download it from Microsoft website. The basic minimum requirements for running Windows 7 are 1Ghz or faster processor 32bit or 64bit, 1GB of RAM or more, 16GB of free hard disk space (20GB for 64-bit), DirectX 9 graphics device with WDDM 1.0 or higher driver.

Now that you have acquired the version most appropriate to you and made sure that your computer can run Windows 7, it is time for the installation/upgrade.

Let's talk about installation first. The way Windows 7 installs is pretty much similar to Vista, but it is more streamlined and takes

much less time. A big change is Windows 7 won't ask you for a product key at the beginning of the setup like Vista did. With Vista the product key entered was used to recognize the edition that you have bought and if you don't enter the product key you can choose the edition that you want to install. But with Windows 7 each genuine image will be labeled with an edition and that edition is installed assuming that you have the product key of that edition. So if you buy Professional edition retail DVD, the image in that DVD will be labeled as professional and it will be automatically installed. The product key is asked during the OOBE (Out of the box experience) stage. But the installation media still contains all the editions of Windows 7.

Tip: You can still choose an edition before installation by deleting the "ei.cfg (which is responsible for labeling the image)" found in the sources directory in the installation disc.

Below is a step-by-step guide for the installation procedure.

- 1) Put the installation DVD in your DVD drive and start your computer.
- 2) Press any key when asked to do so. Then the installation will begin by loading the necessary files.
- 3) Next you have to select the language, time and currency format and the keyboard layout. Then click "Install now".



4) Click on the check box to accept the EULA after which you have to select the installation method which is “custom” here.

5) Now select the partition in which you want to install windows. You can create new partitions or format existing partitions. But be careful as formatting deletes all the data.

6) After that the installation begins which can take 20 or more minutes depending on your system specs.

7) Then it is time for OOBE or out-of-box-experience. System will check the computer performance and you will have to enter certain information such as your username, password etc and also configure Home Group settings and Windows Update settings.

And you are done installing the most reliable operating system from Microsoft yet.

TO UPGRADE FROM WINDOWS XP

If you already have XP or Vista installed on your computer you can upgrade it to Windows 7. But the upgrade process is a bit complex. You cannot do an in-place upgrade from Windows XP. You will have to backup your data and accounts using Windows Easy Transfer tool, install Windows 7 and restore the backed up data. Also you won't be able to restore programs this way. You will have to manually install those programs.

Here's how you can use Windows Easy Transfer to backup data.

1) Insert the windows DVD and go to X:\support\migwiz (where X is your drive) from Windows XP and run migsetup.exe.



2) Click “Next” and you will be provided with three options on where to backup the data. You can choose from an easy transfer cable, a network location and a hard disc or USB drive.

3) Next the tool will analyze and tell us how much space it will take to backup the data. By clicking the “customize” you can manually add folders.

4) After you are done, you have to create a password for your backup and click “save”.

For restoring the backup to Windows 7,

1) Click Start. Go to Accessories, then System Tools and click Windows Easy Transfer.

2) Click next and select the option that you used to backup data. Then select the option “This is my new computer”.

3) Next locate your saved files and unlock it by entering the password that you created earlier. The tool will restore the settings, accounts and data to Windows 7.

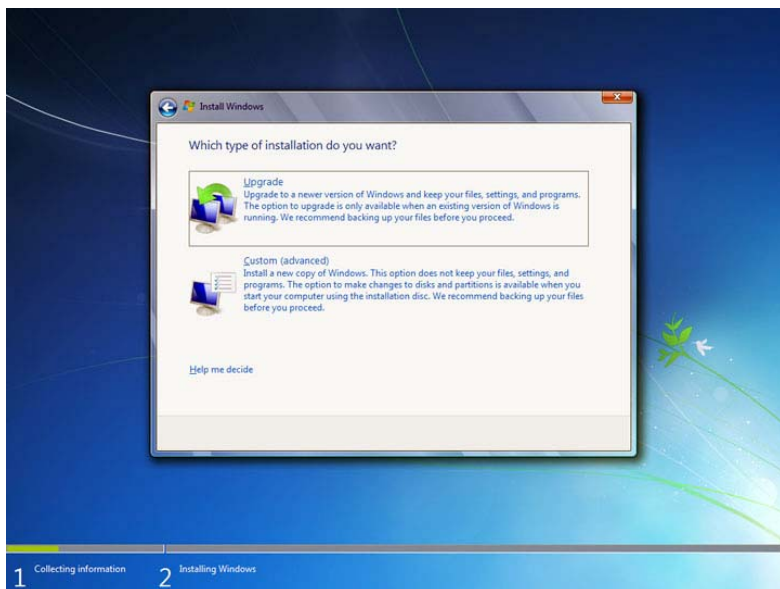
Next manually reinstall the programs that you use and you are done.

TO UPGRADE FROM VISTA

Here also there are a bit of complications. You can do an in-place upgrade from a lower edition of Windows Vista to a higher or corresponding edition of Windows 7 but not to a lower edition of Windows 7. For example you can upgrade from Vista Ultimate to Windows 7 Ultimate but not to Professional. Also you can't upgrade from 32-bit to 64-bit or vice-versa.

To upgrade from a lower version of Vista to the corresponding or higher version of Windows 7,

- 1) Insert the Windows 7 DVD and boot into Vista. Start the installation from Vista.
- 2) After accepting the EULA choose Upgrade.



- 3) Follow the steps given in clean installation guide.

If you want to upgrade from a higher edition of Windows Vista to a lower edition of Windows 7 you will have to follow the same method as that for XP.

TO UPGRADE FROM WINDOWS 7

If you want to upgrade from a lower end edition of Windows 7 to a higher end edition, you can use Windows Anytime Update or WAU. It is completely electronic and superfast. You won't need

any installation media either. That is because all the necessary codes are all ready there in your computer and you just have to unlock it by entering the product key which can be bought online. You can also buy WAU pack from a retail store. The package will contain the product key and no installation media as you won't need it.

TO DUAL BOOT WINDOWS 7 WITH XP

If you want to dual boot between XP and Windows 7 make sure that you install Windows XP first followed by Windows 7. If you have Windows 7 preinstalled and do not want to reinstall it again here is a step by step guide.

1. Boot with Windows XP CD and wait till it loads necessary files.
2. Then select the volume in which you want to install XP (choose a different drive than the one with Windows 7 installed. If you don't have two volumes you can use Windows 7's built in disk resize utility.)
3. Now you can choose whether to format the drive or not. Be careful because by formatting you will lose all the data in the drive.
4. Now setup will copy all the necessary files and reboot. After the reboot you will be prompted to enter the product key and some more information.
5. After that you will be able to boot into XP. But at this point Win7's bootloader will be overwritten by XP and you will lose the ability to boot into Windows 7.
6. If you have Windows 7 DVD things are pretty simple. Just boot with your DVD and enter the recovery console. Click start up repair and you will get back Windows bootloader.

7. If you don't have the DVD or if it came pre-installed, you will have to use a 3rd party app like [vistabootPRO](#) or [easyBCD](#) and reinstall Windows7 bootloader.

In vistabootPRO click system bootloader and select vista bootloader and all drives. Click Install. The procedure is similar with easyBCD.

8. Now start Windows 7, install the utility you are using and add a new entry "Windows XP" and change the boot drive to the one in which XP is installed. You might have to copy ntldr and ntldetect.com from XP CD to the root drive (where XP is installed) before you can boot to XP.

UNDERSTANDING THE NEW STYLE

The most apparent change that you'll see when you first boot into Windows 7 is the new style. Windows 7 has a revamped aero theme and a much larger taskbar. When you first boot into Windows 7 you will only have the Recycle Bin icon in the desktop. There will be three icons (Explorer, Media Player and IE8) in the taskbar and so does the Notification Area which will show Action center, Networking and Volume icons. Unlike Vista, "Getting Started" (Welcome Center in vista) and Gadgets doesn't start with Windows. Talking of gadgets, the sidebar that debuted with vista no longer exists in Windows 7 and the gadgets freely float on the desktop. Surprisingly the gadgets in Windows 7 are the same as that found in Vista with just one new Media center gadget. Now let's look into each feature one by one.

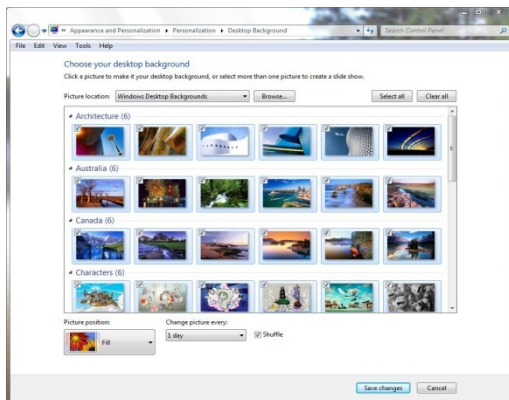
AERO THEMES

An aero theme is a package that consists of one or more wallpapers, windows color, sound scheme and screensaver. You can easily create an aero theme and save it as a ".theme" file. As it is portable you can copy it and use it on other computers running Windows7. Windows 7 comes with lots of region specific themes. Another feature of Windows 7 is desktop slideshow. You can select multiple wallpapers and windows will change the wallpaper in the time specified.

To create a new desktop slide show

- 1) Right click on a blank area of the desktop and select "Personalize".
- 2) Select "Desktop Background" and you will be taken to a window that shows the available desktop backgrounds. You can click browse and select other pictures if you like.

- 3) You can select multiple pictures by pressing and holding control and clicking the pictures.
- 4) Then select the picture position and how often you want to change the pictures. Click “Save”.



Tip: For unlocking Windows 7 hidden regional themes

*1) Go to Windows Explorer. Click on Organize and select Folder and search options. Select View tab and **select Show hidden files, folders and drivers** and **uncheck Hide protected operating system files**.*

2) Now browse to “\Windows\Globalization\MCT\”. There you will find 5 folders of name MCT-XX (where XX =AU, CA, GB, US, or ZA)

3) Open the “Theme” folder situated inside the desired MCT-XX folder. Double click “XX.theme” file and that theme will be activated and available in Personalization Settings screen.

Don't forget to reverse the first step after you are finished to hide protected system files.

TASKBAR AND START MENU

The Windows 7 taskbar has undergone a major update. While the taskbars in previous versions of Windows were for program switching or window management, the Windows 7 taskbar is essentially tweaked (by integrating Quick launch) to be used as a program launcher or at least combines those two features. It has been made larger to improve identification of programs and targeting for mouse and touch. As the taskbar is large the icons are bigger and clearer. The icons of Windows 7 follow a “unification mantra”. That is when you click an icon and open the program, the icon is converted to that program’s taskbar button. No new icons appear. This has been done to avoid clutter that can be caused by lots of icons. Also you can’t pin a program or folder directly to the taskbar. When you try to pin a folder by dragging it to the taskbar it appears in the jumplist of the default Windows Explorer icon and when you try to pin a file, it will appear in the jumplist of the appropriate program. For example when you try to pin Word 2008’s “DOCX” file, it will appear in the jumplist of Word and if Word icon is not present in the taskbar it will be automatically added.

Other visual changes are



- The taskbar and title bar remains transparent when a window is maximized.
- The show desktop has been moved to the extreme right near the system clock in the form of an unmovable transparent rectangle.

- If multiple windows of a program are running the icon shows a visual cue of stacked tiles.
- A more prominent visual effect is seen when you hover over the start menu.

As the start menu was customized extensively under Windows Vista it hasn't changed much except that the power button shows shut down by default. It is now very easy to customize its default behavior.

To change the default behavior of the start menu power button

- 1) Right click on the start menu.
- 2) Under the Power Button action choose the behavior that you want and you are done.

You can search for programs and files using the Windows 7 start menu search just as in Vista. It is programmed to first search for programs. You can even specify parameters such as “to: john” or “from: James” to search for specific mails.

Tip: You can make the taskbar look like the one found in Vista. Right click the taskbar and select properties. Check “Use small icons”.

Also the default style of taskbar doesn't show any labels with icons which can be a bit irritating. But you can change it easily by going to Taskbar Properties and selecting the taskbar buttons behavior as “combine when taskbar is full” or “never combine”.

AERO EFFECTS

Windows 7 includes the effects such as Flip and Flip3D that debuted with Vista and a few other features such as the Aero Peek, shake and snap. These features are not only intended to improve the visual experience, but also make window management much easier.

Aero Peek

Aero Peek is an improvement over the traditional “show desktop” feature in previous Windows versions. It allows you to peek at the desktop. This feature is mainly for viewing the desktop gadgets over the maximized windows. When you hover the mouse over a rectangular area in the extreme right of the taskbar all the open windows become 100% transparent thus showing the desktop. When you move the mouse the windows become normal.



You can still trigger the old “show desktop” by clicking the “peek” button. If you want to turn off peek for some reason you can do so by right clicking the peek button and unchecking peek at desktop. Aero peek is also activated when you mouse-over the mouse over a taskbar thumbnail.

Aero Shake

Aero Shake is a feature that can be best utilized by touch screen PCs. It allows you to minimize or maximize open windows by vigorously shaking a window. All the windows except the one you are shaking are minimized and if you shake it again all the minimized windows will be maximized.

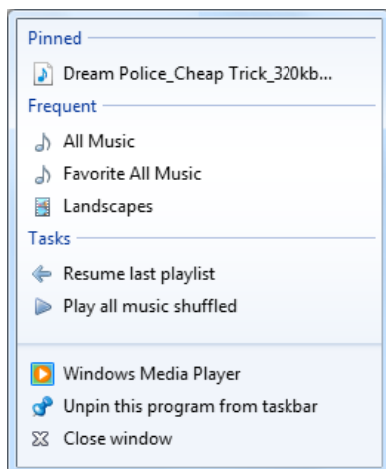
Aero Snap

Once again this feature is mainly for touch screens PCs even though it works with other PCs as well. Aero Snap helps you to stack the open window the way you want by some mouse gestures. When you press and hold the title bar and move it upwards to the top of the screen the window gets maximized. When you hold it and bring it down the window changes back to its original position. Similarly you can stack it to left or right by dragging it to left or right side of the screen.

JUMPLISTS

Jumplist is a new feature of Windows 7 which lets you quickly access recent documents and tasks related to that application. It is the replacement of the traditional right click menu. Jumplists can be accessed by right clicking the application icon in the taskbar or by clicking the taskbar icon and dragging it up (useful for touch screens). Each application can have a jumplist customized for it. For example, when you right click the internet explorer icon the jumplist shows the recently opened tabs and internet related tasks

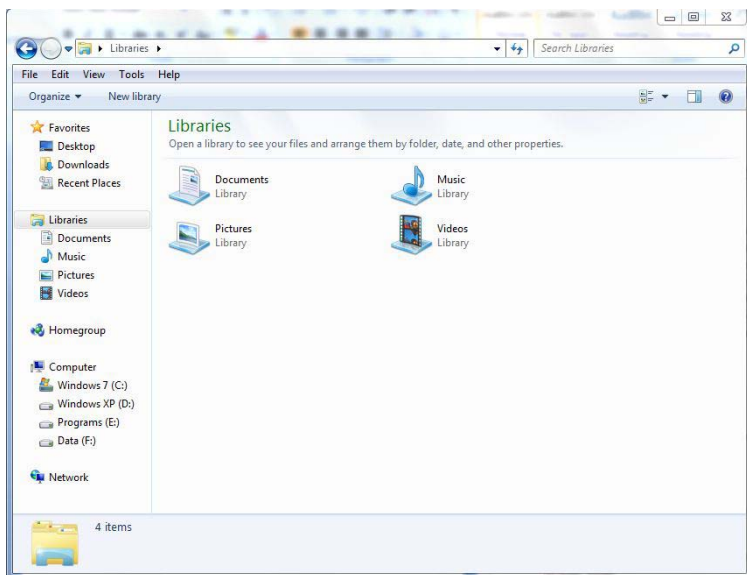
such as start an inprivate browsing and for WMP it shows recently played tracks and specific tasks such as “resume last played” or Play all”.



MANAGEMENT AND NETWORKING

DATA MANAGEMENT

Windows Vista brought a lot of improvements in the folder or data management category with the introduction of breadcrumbs, search box etc in the Windows Explorer. Windows 7 moves a step ahead by adding a new feature called “Libraries”. Libraries are basically virtual folders that aggregate data from different locations. For example, Video library can include personal videos located in C drive and HD videos located in some other parts of the computer and so on.



To create a new library

1) Click on the folder icon in the taskbar or open “computer” and click Libraries on the left pane.

2) Right Click and from the context menu select “New” and then “Library”.

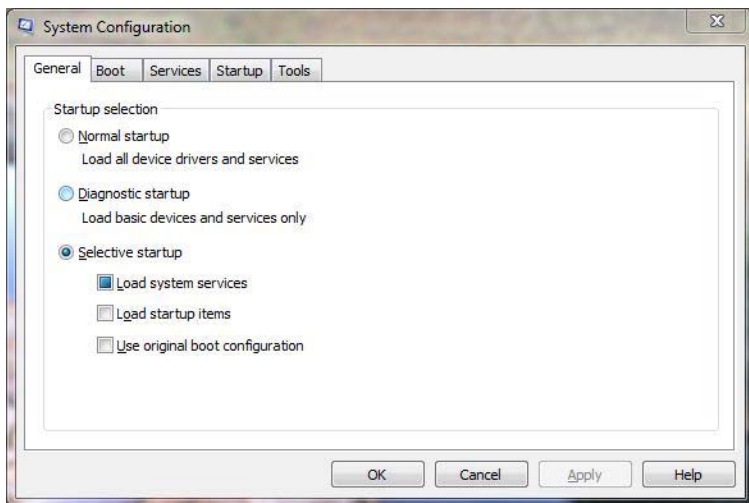
To add files to your library

- 1) To add a folder in your library right click the library and select “Properties”.
- 2) Click “Include a folder”, select the file you want to add and click “include folder”.

PROCESS AND TASKS MANAGEMENT

Windows 7 includes the old task manager that shows running processes and little bit info on the system performance. It is very much similar to the Vista task manager. Like Windows Vista you can start task manager by pressing ctrl + shift + escape.

MSconfig still remains as a faithful tool of the windows user for managing start up programs and for quickly accessing system tools.



To manage start up programs with MSconfig

- 1) Press start and type “*msconfig*”. Then press enter.
- 2) Click the start up tab in the MSconfig window.
- 3) There you will find a list of programs that start with windows and its description.
- 4) Simply uncheck the programs that you don't want to start with windows.

To manage services

- 1) Open Msconfig as mentioned above.
- 2) Select the “services” tab.
- 3) Uncheck the services that you want to disable. But be careful as certain services are essential for the smooth running of Windows. Click “Hide all Microsoft Services” if you want to disable only services of 3rd party programs.

USER ACCOUNTS MANAGEMENT

Windows 7 lets you create two types of user accounts- the standard and the administrator like the previous versions.

To create a new account

- 1) Go to Control Panel and under User Accounts and family Safety click “Add or remove user accounts”.
- 2) Click “Create new account”. Now type a name for the account and select account type.
- 3) Click “create account”.

To create a new password

- 1) Go to “Add or remove user accounts” as stated above. Select the desired user account
- 2) Click “create a password”.

To change the account type

- 1) Go to “Add or remove user accounts” and select the account
- 2) On the left side click “Change account type”.
- 3) Select the account type and click “change account type” button

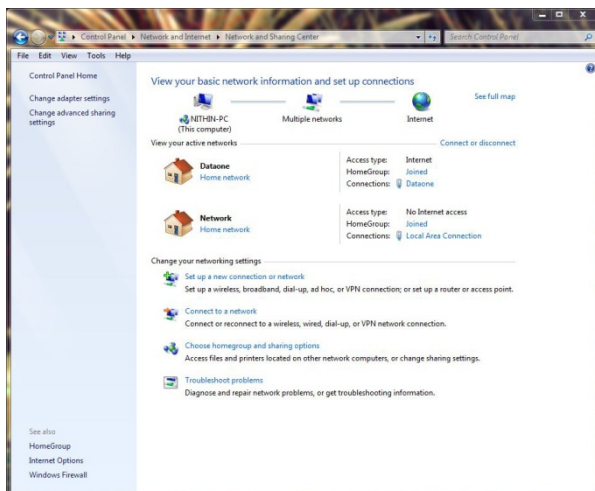
DEVICE MANAGEMENT



Windows 7 includes a new feature called Device Stage that lets you easily manage tasks that you would do with your device. For example when you connect a compatible mobile phone, you can sync music, videos, pictures and contacts with your Windows 7 PC thus limiting the need for any 3rd party application.

NETWORKING

In Windows 7, *Network and Sharing Center* works as the central interface to manage your network. You can view the status of your network connections and access common network related tasks. It can be launched from Control Panel > Network and Internet > Network and Sharing Center.



To create a network connection

- 1) Open Network and Sharing Center and select “setup a connection or network” under “Change your network settings”.
- 2) Select the type of connection and follow the simple wizard.

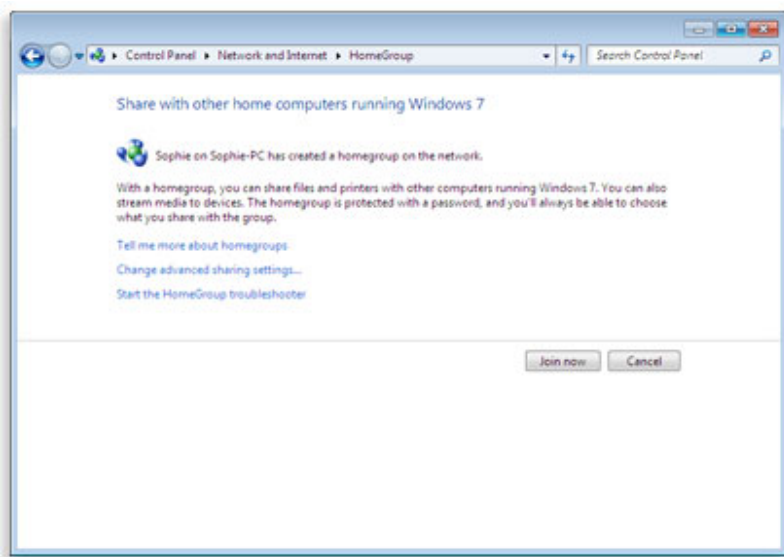
HOME GROUP

Home group is a new feature of Windows 7 that tends to simplify file sharing in your home network. You can share music, documents, pictures, videos as well as USB connected printer through home group. When you create your network and choose

Home as your location, Windows will prompt you to setup a Home Group.

Joining a Home Group

- 1) When your computer is connected to a network where Home group is already set up, Windows will inform you that a Home Group is available to join.
- 2) Once you choose to join, Windows will provide you with necessary information.
- 3) Now click “Join Now”.



- 4) You will be prompted to enter the Home Group password that was generated during the setup of Home group.
- 5) Just enter the password and you will be able to select the files that you want to share.

To view the password of the Home Group that you have setup

- 1) Go to Network and Internet in control panel and click Home Group.
- 2) Under “other Home Group options” click on “view or print the Home Group password”.

If you want to share additional files later simply select the folder and click “share with” in the toolbar. You can make it readable only, readable and writable and also choose whether to share it with specific persons only.

SECURITY AND MAINTENANCE

After the infamous “summer of worms” Microsoft had made security their top priority. That is exactly the reason why Windows Vista was delayed; they believed that the current operating system needed better protection before moving on to its successor.

Windows Vista was built with this point in mind and it included lot of improvements like UAC, Windows Defender etc. Windows 7 is built on the same foundation making it the most secure operating system yet from Microsoft.

USER ACCOUNT CONTROL

During the Windows XP era, an administrator account had full rights to make any change to the computer. But the problem was rogue programs when run in admin accounts inherited all those rights and were free to make system wide changes. In Windows 7 (like Vista), the administrator account doesn't have full admin privileges. When you need such privileges in situations such as installing a program, UAC confirms that you want to use your admin right to prevent unwanted changes. The UAC in Windows 7 has been tweaked to become much more flexible.

To change the user account control settings,

- 1) Go to Action Center and select “change user account control settings” from the left pane.
- 2) Now choose UAC and you can choose from 3 options. They are
 - a) Always notify (Same as Windows Vista)
 - b) Notify when Programs make changes to my computer (dim the screen)

c) Notify when Programs make changes to my computer (do not dim the screen)

d) Never notify (no UAC)

Always notify



Never notify

Never notify me when:

- Programs try to install software or make changes to my computer
- I make changes to Windows settings

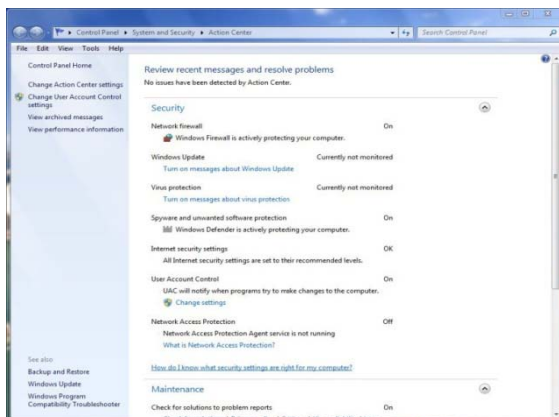


Not recommended but can be selected if you use programs that are not certified for Windows 7 because they do not support User Account Control

It is recommended that you keep the default UAC settings.

ACTION CENTER

Action center is the replacement for Security Center introduced with XP SP2 and continued in Vista



It is basically a centralized location to view all the security and management related settings for Windows. It alerts you about your antivirus, Windows update and Firewall status just like the old security center did. Apart from that it also displays the latest backups and includes a very useful and “working” troubleshooting utility.

WINDOWS DEFENDER

Windows Defender, the anti-spyware program from Microsoft was introduced with Vista. An improved version is included in Windows 7 as well. The new version has undergone minor changes, both inside and outside. It now has a more streamlined UI and uses less system resources than its predecessor. It unfortunately lacks the very useful “Software Explorer”.

To scan the computer using Windows defender

- 1) Press start and type “win def”. Under control panel section, select “Windows defender”.
- 2) Click the down arrow next to scan and select the type of scan (quick, full and custom).
- 3) If you selected custom scan, choose the location that you want to scan and press “Scan now”.

INTERNET EXPLORER 8 SECURITY SETTINGS

The new IE8 includes a few security improvements such as inprivate browsing and smart screen filter to protect the user from various online threats. Smart screen filter is an improvement over the “anti-phishing filter” in Vista. It stops you from visiting sites that try to steal important data and inject malware to your PC.

The new inprivate browsing feature allows the user to browse the internet without storing any kind of information, cookies or form data.

To start inprivate browsing

- 1) Open Internet Explorer.
- 2) Press the safety button in the toolbar and select inprivate browsing.

You also start inprivate browsing from IE8 jumplist.

Windows 7 also includes a stripped down version of Vista's parental controls feature. You can apply controls over time limit, games and application usage to any standard account while Microsoft has removed the web filtering and activity reporting. It is now bundled with Windows Live Essentials as Windows Live Family safety.

MAINTENANCE

Maintaining the operating system is a very important task and absolutely essential for the smooth running of your system. Windows 7 includes lots of tools such as Backup and Restore center and Disk defrag. Let's look into those features one by one.

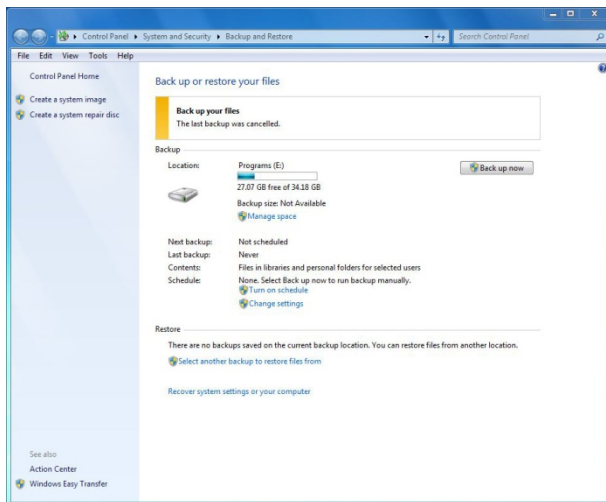
BACKUP AND RESTORE CENTER

Backup and Restore center lets you easily backup the computer or restore backed up data.

To create a backup

- 1) Go to Control panel > System and Security > Backup and Restore

2) Click the Backup “Now button”.



3) Select the location where you want to save your backup. Click Next.

4) Now select how you want to backup i.e. whether you want to manually select the files that you want to backup or let windows choose what to backup.

5) If you selected manual backup option select the files that you want to backup. Check “create a system image” check box if you want to create a system image that can be used to restore the operating system as it is, in case windows develop some problems in the future. System image will be automatically included if you chose windows to automatically select files to backup. Click Next.

6) Click “save settings and run backup”.

To restore a backup

1) Open Backup and restore Center.

2) You can search for specific files that you want to restore from all the backed up data by clicking “Restore my files”. Otherwise click “select another backup to restore files from”.

3) Next select the desired backup and click “Next”.

4) Now you can choose whether you want to restore the entire backup or specific files from that backup.

5) Now select the location where you want to restore the backup and click “Restore”.

To create a system restore disc

1) Open Backup and Restore center.

2) select “create a system repair disc” from the left pane.

3) Select the drive and click “create disc”.

To restore system settings

1) Go to Backup and restore center and click “restore windows settings” (or you can open system restore by typing “sys re” in start menu search.).

2) Select the appropriate restore point and click “Next”.

WINDOWS UPDATE

Windows 7 includes an improved version of the Windows update. Now there are 3 panes. From the one on the left you can choose the updates by importance i.e. Important, Optional etc and the middle pane display the available updates. Click on any update and the information about it will be displayed in the right pane.

To update using Windows Update,

- 1) Go to control panel and select “System and Security”. Now click Windows Update.
- 2) An available list of updates will be listed or else click “check for updates” in the left pane.
- 3) Now click “updates are available”. Select the updates that you want to install and click OK.
- 4) Click “Install Now”.

To change Update settings,

- 1) Open Windows Update and click “change settings” on the left pane.
- 2) select the desired option from the drop-down box. You can choose between - install updates automatically, download updates but let me choose whether to install them, check for updates but let me choose whether to download or install them and never install updates.

You can also change the way recommended updates are shown and allow (or disallow) other users to install updates by checking/unchecking appropriate boxes.

It is recommended that you turn on automatic updates so that your system remains protected against the latest vulnerabilities.

DISK DEFRAGMENT

Disk Defragmenter basically defrags the fragmented files and thus makes your system run faster. You can open Disk defragmenter by going to Start > All programs > Accessories > System Tools > Disk Defragmenter.

To defragment your hard drive

- 1) Open disk defragmenter.
- 2) Select the hard drives and click “analyze disc”. If it shows that your drive is fragmented, click “defrag now”.
- 3) You can also run disk defragmenter on a schedule. To do that, first click “configure schedule”. Select the frequency, day, time and the discs that you want to defrag. Click OK.

MULTIMEDIA AND GAMING

Windows 7 includes a new version of Windows Media Player and Media Center. Windows Media Player 12 (or WMP12) has undergone slight visual changes. It now consists of 3 tabs at the right - Play, Burn and Sync. It also has a mini player mode which will come useful when you want to see the player while you are doing something else. Technically WMP12 includes all the previous formats it supported plus AAC, H.264, DivX and Xvid.

But the most intriguing feature of Windows 7 is “Play To”. Through “Play to” feature you will be able to play pictures, music and videos across compatible devices through any network which you are connected to, without any setup or installation of additional software.

First you have to turn on media streaming. For that

- 1) Open WMP12 and click “Stream”. Select “Turn on home media streaming”. Turn on home media streaming won't be available on the Stream menu if streaming is already turned on.
- 2) In Media streaming options, click “Turn on media streaming”. Click OK.

To use Play to in WMP

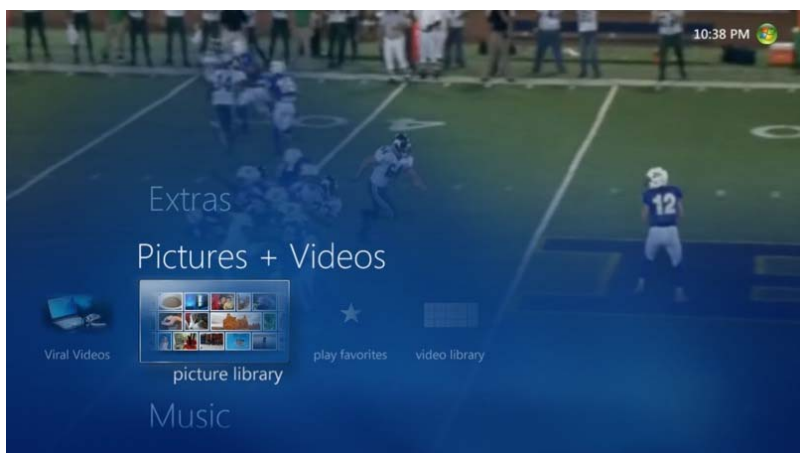
- 1) Open Windows Media Player. Click the Play tab.
- 2) Select the items that you want to play in the Player Library, and then drag those items from the details pane into the list pane.
- 3) Click the “Play to” button at the top of the list pane; click the device on your network that will receive the media.

4) In the “Play To” dialog box, use the playback controls to play, pause, or stop the media stream, and to change to the next or previous item in the list.

To use Play to outside WMP

- 1) Select the files that you want to stream to another device.
- 2) Right click, point to “Play To” and select the devices that you want to stream to.

Windows Media Center has also undergone a few changes. When you are playing a video and navigate back for some other purpose the video will continue to play in the background in a dissolved state with the background.



Another addition is the slideshow creator in the Picture library.

To create a slide show

- 1) Go to the Pictures library and select “slideshows”.

- 2) Select create slideshow and enter the desired name for your slide show.
- 3) Select the location to browse for media, select the pictures and save it.

WINDOWS DVD MAKER

Windows 7 includes the old DVD Maker found in Vista with very few minor changes. With DVD maker you can easily burn home videos as a cool DVD.



To create a video DVD,

- 1) Open DVD Maker by pressing Start > All Programs > DVD Maker.
- 2) If you are starting it for the first time, it will show a welcome screen. Skip it by clicking “Choose photos and videos”.

3) Now you can add the desired photos or videos by clicking “Add Items”.

4) For changing DVD playback options click “Options” in the lower right side. You can also choose the aspect ratio and video format. Click OK when you are done.

5) Click “Next”. Choose the desired menu style and click burn for start burning the DVD (make sure that you have an empty DVD in your DVD drive).

GAMING

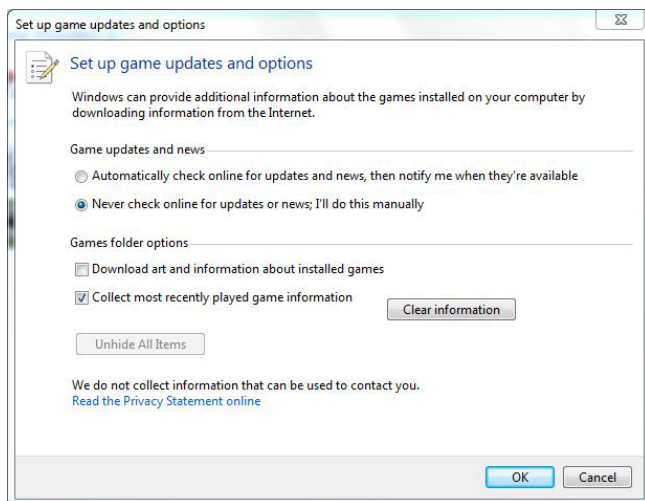
Coming to games Chess Titans, Hearts, Mahjong Titans and Purple Place have been brought to Windows 7 from Vista. The old games like Minesweeper, Solitaire and FreeCell are also present. But for some strange reasons, Ink ball a game found in Vista, is absent in Windows 7.

All the installed games can be viewed from the Games Explorer which hasn't been tweaked much. You can view information about an installed game like its ESRB rating from the right pane of the Games Explorer.

To change game updates and options of Games Explorer,

1) Open Games Explorer from Start > All Programs > Games > Games Explorer.

2) Click “Options”. You can choose to automatically check for updates of games and also change other settings such as “download art and information” or “collect most recently played game info” by checking/unchecking appropriate boxes.



Use can also change parental control options by clicking “Parental Controls” from the toolbar.

To uninstall installed games

- 1) Go to Control Panel and click “uninstall a program” under Programs and features.
- 2) From the left pane select “Turn windows feature on or off”.
- 3) Under games, uncheck the games that you want to install and click OK.

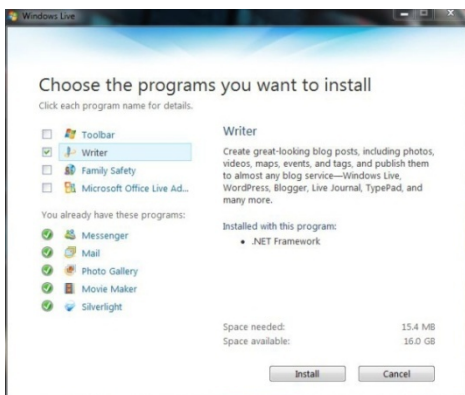
You can reinstall those games by checking the checkboxes of the games that you want to install.

WINDOWS LIVE AND SECURITY ESSENTIALS

Windows Live Essentials are a set of applications that tend to improve the user experience. It includes Windows Live mail, Windows Live Photo gallery, Windows Live Toolbar, Windows Live writer, Windows Live Movie maker and Windows Live family safety. Bundling of these programs as a separate suite has several benefits. First of all they can be updated more frequently than the operating system itself. People who doesn't want these applications like businessmen doesn't have to manually uninstall it and those want specific programs only has the choice of installing only those programs.

Installation of Windows Live

- 1) First you will have to download the setup files from download.live.com. You can download online installer which allows you to choose what you want to download or you can download the installer that includes everything.
- 2) After you have finished downloading, double click the EXE file.
- 3) Accept the EULA and then select the softwares that you want to install. Click "install".



MICROSOFT SECURITY ESSENTIALS

Microsoft Security Essentials or MSE is a free antivirus program from Microsoft. It is fast, reliable and is less heavy on system resources. You can download it from the Microsoft download centre. As it is built on the same proven engine of Microsoft's Forefront family it is completely reliable. When you install MSE in Windows 7 or Vista, it replaces Windows Defender as it includes the features of Windows Defender.

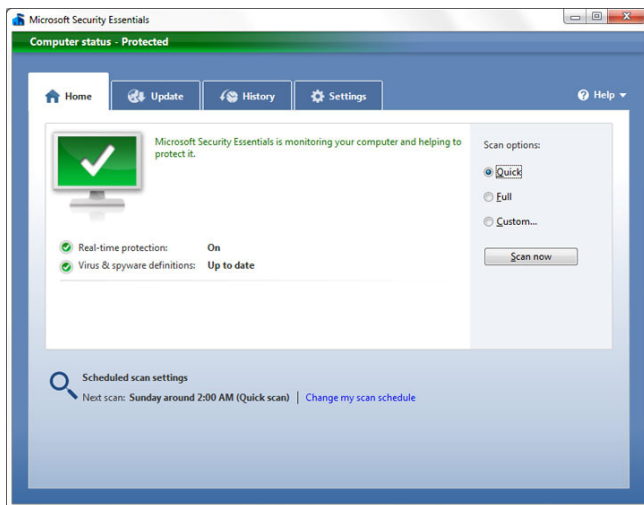
Installing MSE

- 1) Download the installer for your operating system from download centre. There are separate installers for 32-bit and 64-bit except for XP which has only a 32-bit installer.
- 2) Double click the installer to run the setup wizard. The setup first checks whether your operating system is genuine and if it is, you can continue with the installation by clicking "Next".



- 3) Select the installation folder and click OK. You will have to restart your computer after installation.

The interface of MSE is simple, clean and is similar to that of Windows Defender. It consists of four tabs – Home, Update, History and Settings as shown below.



To scan your system using MSE,

- 1) Open MSE and go to Home tab.
- 2) Select the type of scan and select “scan now”. You can choose the location that you want to scan if you select “Custom scan” option.

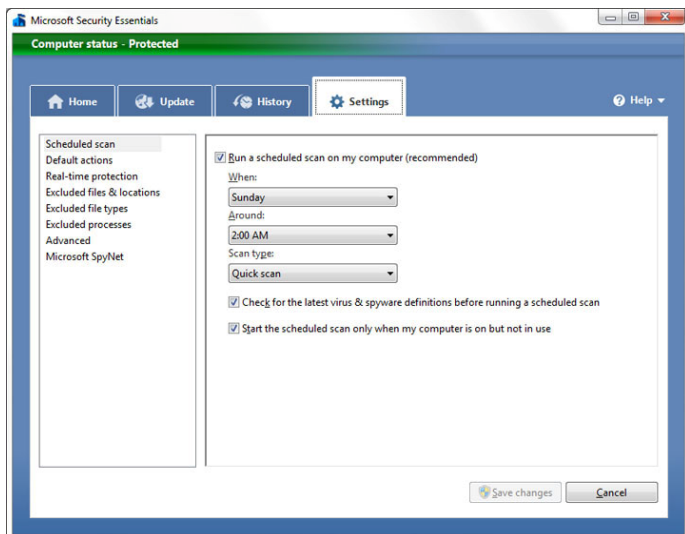
You can also scan a folder from the explorer by right clicking and selecting “Scan using MSE”.

To update MSE

- 1) Open MSE and go to the Update tab.
- 2) Click “Update”. It is as simple as that.

To change settings

- 1) Go to the settings tab.
- 2) You can choose whether to run a scheduled scan from here and also change other settings such as real-time protection, excluded files and folders etc.



WINDOWS 7: RIGHT FOR ENTERPRISE?

When Windows Vista was released it was haunted by many problems such as poor hardware and software compatibility. This was the main factor that delayed or prohibited the deployment of the operating system by the corporate society. Simply Vista didn't run on their present hardware and couldn't run applications that were essential for their business. Windows 7 on the other hand has received some excellent reviews and runs faster on older hardware. It still has the same minimum requirements as that of Vista but the change is during the release of Vista, common man owned a computer with 512MB of RAM which was the standard that standard has evolved over time to suit the requirements of Windows 7.

It also comes with features especially designed for enterprise such as Direct Access, BranchCache, federated search, BitLocker to go, AppLocker and last but certainly not the least Windows XP mode. The above said features plus the fact that Windows 7 is the most secure operating system from Microsoft yet, makes Windows 7 the perfect operating system for enterprise.

WINDOWS XP MODE

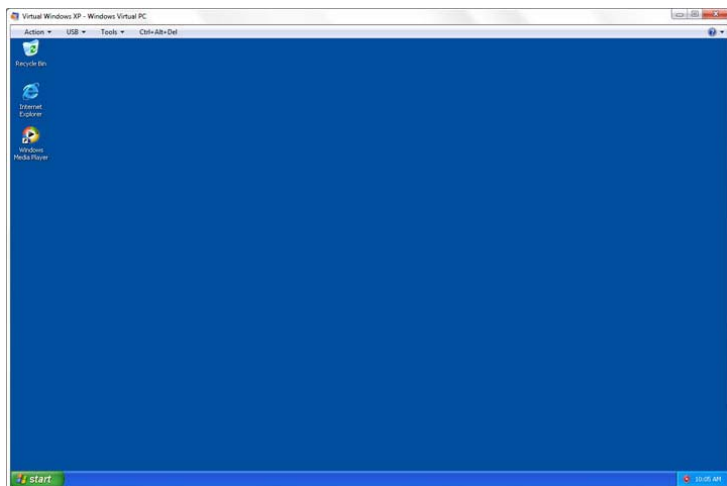
Windows XP mode is one of the most talked about feature of Windows 7 and is available for Windows 7 Professional and Enterprise/Ultimate users. Windows XP mode consists of the latest version of Microsoft Virtual PC and a fully licensed copy of Windows XP Professional SP3 (free of cost). You can install applications in XP running virtually like all other virtualization softwares. But the best and the most important feature of Windows XP mode is that you can run applications installed on virtual XP just like you have installed it on Windows 7 side by side with Windows 7 applications. You will be able to launch those

applications even without starting VirtualPC directly from Windows 7 start menu.

Thus enterprises that still rely on native Windows XP applications such as IE6 will be able to run those applications without any compatibility problems on Windows 7.

To install Windows XP mode

- 1) Download the installers from [Microsoft website](#).
- 2) Start the installation by double clicking the executables.
- 3) Accept the license terms of Virtual PC and Windows XP mode.
- 4) Next you have to enter a password for the default user and setup Automatic Updates.
- 5) Then the installation of XP begins which may take some time to complete.



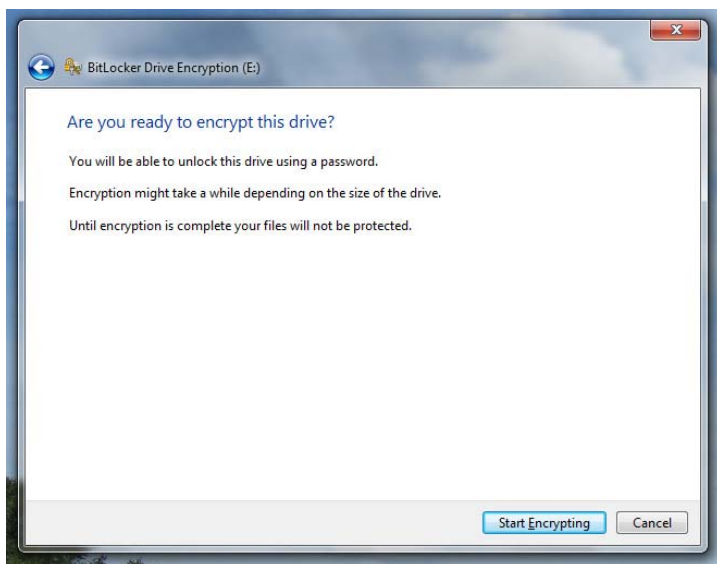
After finishing the installation you will be able to access the XP desktop on Windows 7.

BITLOCKER TO GO

Bitlocker To Go is a feature only available to Windows 7 Enterprise/Ultimate users that gives them the ability to encrypt removable storage devices.

To encrypt a USB drive using bitlocker To Go

- 1) Plug in the USB drive to your computer.
- 2) Open “Computer” and right click the disk. Select “Turn on Bitlocker”.
- 3) Next you can either choose to use a password or a smart card.
- 4) Click “Start encrypting”.



The encryption time can vary according to the size of your disk.

RESOURCES FOR WINDOWS 7

Although I have written this book by my personal experiences with Windows 7, the following sites windows 7 the following sites have helped me a lot to understand the innards of this operating system.

[Windows 7 Home Page](#)

[Microsoft TechNet Magazine](#)

[Engineering Windows 7 Blog](#)

[Windows 7 Team Blog](#)

[Paul Thurrot's Supersite for Windows](#)

Other resources for Windows 7

[The Windows Club](#)

[Windows Talk](#)

[Windows Valley](#)

[Within Windows](#)

[Ed Bott's blog on ZDnet](#)

[Mary-Jo Foley's blog on ZDnet](#)

You can also find more info on Windows 7 in my own weblog [WinData Center](#).

Some useful keyboard shortcuts

Win Key + Home = Clear all but the active window

Win Key + Space = Aero Peek

Win Key + Up arrow = Maximize the active window

Win Key + Down arrow = Minimize the window or restore the window if it's maximized

Win Key + Left/Right arrows = Snap to left/right

Win Key + T = Focus and scroll through items on the taskbar.

Win Key + P = Adjust presentation settings for your display

Win Key + (+/-) = Zoom in/out

Shift + Click a taskbar item = Open a new instance of that application

Win key + X = Open Windows Mobility Center

Wind Key + E = Open Windows Explorer

Win key + G = Bring gadgets to the top of the order

Windows Key + F = Search

Windows Key + D = Show/Hide Desktop

Windows Key + R = Run

Alt + Tab = Flip

Win Key + Tab = Flip 3D