

Upgrade/Migrate to Windows 7 from Vista or XP



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UPGRADING YOUR OLD PC - HARDWARE CONSIDERATIONS

- UPGRADE ADVISOR TOOL: Can your old XP PC run Windows 7? To find out, download and run the "Microsoft Windows 7 Upgrade Advisor" Tool:
<http://www.microsoft.com/windows/windows-7/upgrade-advisor.aspx>
- Before committing to an upgrade, I suggest you read my "BUYING A WINDOWS 7 PC" sheet. There are lots of thoughts and comments there regarding the PC hardware.
- Many PC's with XP Pre-installed were marketed as "Vista Ready". They may not be capable of running Windows 7 (or Vista). (*Blame Microsoft for that*). Run the Upgrade Advisor Tool to find out.
- In most cases, PC's sold with Windows VISTA pre-installed should be easily upgradable to Windows 7. They will run faster if you do. My personal recommendation is to never do an upgrade from Vista, but to migrate from Vista to Windows 7 by doing a clean Windows 7 install. You can use the Easy Transfer Tool to move your data and settings.
- If your PC is currently running Windows XP, then buying a whole new Windows 7 PC is usually a better bet than upgrading your old PC. See my comments in a later section of this sheet.
- CPU: If you plan to install Windows 7 64-bit, make sure your CPU can support 64-bit operation. You can run the "SecurAble" utility to find out. From <http://www.grc.com/securable.htm> .
- HARD-DRIVE SPACE: Make sure you have plenty of extra hard-drive space. A typical Windows 7 system with a few programs can easily exceed 25-30 GB. *WARNING: If you do a full Windows 7 install and do not tell the Windows 7 Installer to format the drive, then all of your old system files and all of your new system files will all be using space the hard-drive. Do you have room for that?*
- SSD's (Solid State Hard Drives): Windows 7 runs like lightning with a SSD main-drive. If you plan to go to an SSD, I recommend upgrading to the SSD at the same time you upgrade to Windows 7. See more about SSD's in my "BUYING A WINDOWS 7 PC" sheet. *NOTE: Your PC's BIOS must support "ahci" SATA control to use an SSD.*
- DEVICE DRIVERS: Even if the Upgrade Advisor says all is OK, you should go to the Manufacturer's website for every one of your external devices (Printers, scanners, cell phones, cameras, etc) and make sure they offer drivers for their gear for the version of Windows 7 you want (32-bit or 64-bit). Although Windows 7 has drivers built-in for many devices, those devices may not be fully functional unless you use drivers from the Device Manufacturer.
- WIRELESS CARD. If you are upgrading a Laptop, make absolutely sure Windows 7 supports the exact model of Wireless Card installed inside the laptop. This cannot be changed on a laptop.
- DVD PLAYER: Your PC must have a DVD Player since the Install Media for Windows 7 is on DVD, not CD.
- MEMORY (RAM):
 - ✓ Your PC should have at least 2 GB of RAM to run Windows 7. More is better, although Windows 7 32-bit does not recognize more than 3 GB.
 - ✓ Unless there is some reason you need more than 3 GB of memory, there is no good reason to go to Windows 7 64-bit. The 32-bit version will do just fine and has many more device drivers available than the 64-bit version.
 - ✓ If you are upgrading a Laptop, make sure the Memory Modules are ALL easily accessible for upgrading before you buy the new memory sticks. Some laptops have one or more memory sticks buried in the bowels of the Laptop, which requires disassembly by a professional.

UPGRADING TO WINDOWS 7 ON AN "XP" PC - GENERAL INFO

- XP cannot actually be upgraded to Windows 7. Although you do use the "Upgrade" version of the Windows 7 Install DVD, you actually will be doing a fresh install of Windows 7. You will be migrating your personal data and settings to Windows 7 using the "Windows 7 Easy Transfer Tool".
- MY ADVICE IS "DON'T UPGRADE": I generally discourage everyone from upgrading an XP PC to Windows 7 unless there are special circumstances. Upgrading should not be a hasty decision. My advice is to buy a new PC with Windows 7 already on it, then migrate everything over to it.
- Be aware that if your "OLD, SLOW" XP PC gets upgraded to Windows 7, it will end up being an "OLD, SLOW" Windows 7 PC.
- Be sure you have read all the Hardware considerations above.
- PROGRAMS:
 - ✓ Think about all the programs you currently have installed on your XP PC. If you don't know, then go to (*Control Panel > Add/Remove Programs*) and look. 20? 30? 100? Lots of them. They can support all kind of devices: Cell Phones, Music Players, Cameras, Embroidery Machines, etc.
 - ✓ You must be prepared to re-install ALL the Application Programs and some of them may not even support Windows 7. Then you will have to go buy a newer version of the Program.
 - ✓ You must have all your Program CD's available along with all the required PRODUCT KEYS for ALL YOUR PURCHASED PROGRAMS.
- Devices that work on XP may not work with Windows 7. You must find out if Windows 7 Software & Drivers for your devices are available from the device manufacturer (32-bit or 64-bit).
- When you install Windows 7 on an XP Machine, one of three things will happen depending on how you answer the questions and "check boxes" during the install.
 1. By default, the Windows 7 Installer puts your entire old XP system into a folder called C:\WINDOWS.OLD. This is OK unless you are short on hard-drive space. You can delete it later.
 2. You can tell the Installer to format the drive before installing the new Windows 7 system. This will delete all previous files (and malware) and is the best way, as long as all your data and files have been saved to an external hard-drive either manually or with the Easy Transfer Tool.
- You can end up with a Dual-boot Windows 7 system and XP system. This is hard to un-do so unless that is what you want, be careful.

UPGRADING to WINDOWS 7 from a VISTA PC - General Info

- My personal recommendation is to NEVER do an upgrade from Vista to Windows 7, but rather to migrate from Vista using a clean install of Windows 7 and using the Easy Transfer Tool to move all your data and settings. Unfortunately, you will have to manually re-install all your application programs, but you will end up with a cleaner system than you will from an upgrade. You will need the original CD's for all necessary software. If there are programs on the PC that came with it new and did not come with re-install CD's, you will have to buy the programs.
- Officially, the upgrade only works when you are going to a similar version of Vista and Windows 7 (IE: Vista Home Premium to Windows 7 Home Premium). There are workarounds in some cases, but they usually require a fresh install of Windows 7.
- 32-bit Vista cannot be upgraded to 64-bit Windows 7. They are incompatible and there is no workaround. You must do a fresh install of Windows 7 64-bit. You will have to re-install all your programs, so plan to have all your CD's and Product Keys handy. (*Also, 64-bit Vista cannot be upgraded to 32-bit Windows 7*)
- IMAGE BACKUP: I recommend doing a full image backup of drive C before touching anything. This will ensure that you do not lose any data during the upgrade/install of Windows 7.
- If you are migrating Vista to an incompatible version of Win7 (IE: 32-bit Vista to 64-bit Win7), the Windows Easy Transfer Tool can be used to transfer your data and settings to Windows 7. First, save your data and settings with the Tool, then do a fresh install of Windows 7, then restore your data and settings with the Tool. You will have to reinstall all Programs, and will need all the original CD's and Product Keys for that. *Also see my sheet called "BACKING UP YOUR PERSONAL DATA" at www.jimopi.net*
- If your Vista system has Microsoft Office and you need to do a fresh install of Windows 7, you will need the original Office CD's and the original Office Product Key. (*Note: The Key can be obtained from the old system using Belarc Advisor **before you close down the old system.***)
- If your current external devices (Printers, scanners, etc) work with Vista, they should also work fine with the equivalent version of Windows 7. Warning: If you are moving from Vista 32-bit to Windows 7 64-bit, there is a good chance older devices will not work. Many older devices do not have drivers that support Vista 64-bit or Windows 7 64-bit. Check with the manufacturer's website for Windows 7 64-bit Driver availability.

MIGRATING TO A NEW WINDOWS 7 PC FROM AN OLD "XP" PC - GENERAL INFO

- This means taking all your "Stuff" from your old XP PC and putting it onto your new Windows 7 PC.
- Migrating all your folders, files, data, preferences, and settings from your XP PC, using the "Windows Easy Transfer Tool" is simple, but you do have to re-install all your programs from scratch. That means you will need to have the original Install CD's and PRODUCT KEYS for ALL YOUR PURCHASED programs on hand.
- See my sheet called "BACKING UP YOUR PERSONAL DATA" at www.jimopi.net
- OFFICE: If your XP system has Microsoft Office 2003 or newer and you want to install it under Windows 7, you will need the original CD's and the original Office Product Key. *(Note: This Key can be obtained from the old XP system using Belarc Advisor, before you close down the old system).* If you do not have the CD's and Product Keys, I suggest you try OPEN OFFICE (Free).
- DEVICE DRIVERS: Many older external devices (printers, scanners, etc) do not have drivers for Windows 7, especially Windows 7 64-bit. The only solution may be to buy a newer device that supports Windows 7. Check with the manufacturer's website for Windows 7 driver availability.
- The "Maximum PC" Magazine Windows 7 Upgrade Guide gives some good tips: http://www.maximumpc.com/article/features/windows_7_upgrade_guide_all_your_questions_answered?EMC-R3A917316679
- Never attempt to take an Image Backup of the old PC and try to put it on the new PC. You'll not only lose your Windows 7 installation, but you'll end up with an unbootable PC.

VIRTUAL XP MODE:

- If you plan to run Windows 7 in Virtual XP Mode, you must use Windows 7 Professional or higher. Windows 7 Home Premium does not support Virtual XP Mode.
- Windows 7 VIRTUAL XP MODE also requires that the CPU supports Hardware Virtualization (VT). You can verify that the hardware is capable by using the same "SecurAble" utility from <http://www.grc.com/securable.htm>
- NOTE: There is a workaround for all these restrictions called "Virtual PC 2007" (all software). Virtual PC 2007 runs good, but is significantly slower than "Virtual XP Mode"). See: <http://www.microsoft.com/windows/virtual-pc/support/virtual-pc-2007.aspx> *(Note: You can even install a full Windows 98 system inside Virtual PC 2007)*

MIGRATING TO WINDOWS 7 ON AN XP/VISTA PC - CHECKLIST

This Checklist is for installing a fresh copy of Windows 7 over an old XP or Vista system.

On the old XP/VISTA system:

1. Verify the PC has adequate RAM for Windows 7 (*2 GB minimum, but 1 GB will work*).
2. Install and run the SPEEDFAN utility and check that the PC temperatures are OK. _____ ° C
3. HARD-DRIVE HEALTH: Run the HDTUNE, CRYSTAL DISK INFO, and SPINRITE utilities.
4. HARD-DRIVE FREE SPACE: Make sure it has plenty of space for both the current operating system and data (*the "C:\windows.old" folder*) AND the new Windows 7 Operating system & data. If not, then plan to reformat the hard-drive during the install; In which case you will have to boot from the Install DVD to see the Drive Options.
5. Run the SECURABLE utility and the Windows 7 Upgrade Advisor tool to see if the system can use the 64-bit version of Windows 7.
6. ANTI-MALWARE: Run all available Anti-Malware scans. (*I prefer the Kaspersky Virus Removal tool to catch any rootkits that could hang around and ruin the Windows 7 install*).
7. Install and run BELARC ADVISOR and save the results to a flash drive.
8. IMAGE BACKUP: If you are going to install Windows 7 on the same PC that now runs XP, do a full image backup of drive C, just in case all goes to hell.
9. Copy down the Browser "Home page/s" for each user and each browser.
10. Look for User Data on the Desktop and other places and put copies of the data into the My Documents folder (*This is to make sure the EASY TRANSFER TOOL finds and saves it*).
11. Run the EASY TRANSFER TOOL on the XP/VISTA system. (*See my WINDOWS 7 EASY TRANSFER TOOL TIPS below*). When you run it, make sure you check the boxes for all desired folders (click Customize) or you can miss important data.

INSTALL SEQUENCE

1. Follow this sequence to migrate your PC to Windows 7:
 - a. I recommend that you connect the PC to the internet during the install to avoid complications.
 - b. With XP/VISTA still running, insert the desired Windows 7 install DVD. (*32-bit or 64-bit*)
 - c. If the DVD does not start on its own, open the DVD and click setup.exe.
 - d. Click "Install now".
 - e. When asked which type of installation, click "Custom".
 - f. Let it run and reboot without you touching anything. It will install Windows 7 and put the entire old system into a folder called C:\windows.old.
 - g. When it is done installing and rebooting, it will ask for a Product Key. Uncheck the box for "Automatically activate when online" and click Next.
 - h. Enter the Product Key, then go to my "INSTALL & CUSTOMIZE WINDOWS 7" checklist.

ON THE NEW WINDOWS 7 SYSTEM:

1. Finish installing/customizing Windows 7 per my "INSTALL & CUSTOMIZE WINDOWS 7" checklist.
2. Run the EASY TRANSFER TOOL on the new Windows 7 system when told to in my checklist. Be sure to "Map User Accounts". *See my Tips in the MAPPING USER ACCOUNTS section below to make sure the correct user data and settings ends up in the correct User Accounts.*
3. OUTLOOK EXPRESS: To move your Outlook Express Account into Windows Live Mail, go look in the WINDOWS LIVE MAIL section of my "WINDOWS 7 TIPS" sheet at www.jimopi.net.

UPGRADING A VISTA SYSTEM TO WINDOWS 7 - CHECKLIST

- This checklist is only for a “32-bit Vista to 32-bit Win 7” upgrade or for a “64-bit Vista to a 64-bit Win 7” upgrade. This upgrade should save all your data and installed programs.
- **WARNING:** A clean install of Windows 7 always gives you a better, cleaner, faster system than one that has been upgraded from Vista. The downside is having to re-install all your programs.

BEFORE THE UPGRADE:

1. Install and run the SPEEDFAN utility and check that the PC temperatures are OK. _____ ° C
2. **HARD-DRIVE HEALTH:** Run the HDTUNE, CRYSTAL DISK INFO, and SPINRITE utilities.
3. **HARD-DRIVE FREE SPACE:** Make sure drive C has plenty of extra space to process the upgrade.
4. **ANTI-MALWARE:** Run all available Anti-Malware scans. (*I prefer the Kaspersky Virus Removal tool to catch any rootkits that could hang around and ruin the Windows 7 upgrade*).
5. Install and run BELARC ADVISOR. Save the results to a flash drive.
6. **IMAGE BACKUP:** Do a full image backup of drive C, just in case all goes to hell.
7. **PROGRAM REMOVALS:** Remove any unnecessary programs such as extra anti-malware programs or utilities like iolo System mechanic that may interfere with the upgrade. You can always reinstall them later.
8. Copy down the Browser "Home page/s" for each user's browsers, just in case.
9. It doesn't hurt to run the EASY TRANSFER TOOL on the VISTA system at this time. This way, if the upgrade goes to hell, you can do a clean install of Windows 7 & use the EASY TRANSFER TOOL to recover your data and settings (*See my WINDOWS 7 EASY TRANSFER TOOL TIPS on the next page*).

UPGRADE: Follow this sequence to upgrade the Vista system to Windows 7:

1. Disable any real-time protections running in your antimalware programs.
2. Set up the Power Options for “High Performance” and to NEVER Sleep or Hibernate.
3. With VISTA running, insert the Windows 7 install DVD. (*Use the correct DVD: 32 bit or 64 bit !*).
4. I recommend that you connect the PC to the internet during the install to avoid complications.
5. If the DVD does not start on its own, open the DVD and click setup.exe.
6. Click "Install now".
7. When asked which type of installation, click "Upgrade".
8. A window will pop up that may give you advice on program compatibility issues. You may be advised to cancel the upgrade, remove some programs and start over. Follow the instructions.
9. The upgrade will run (maybe a long, long time; possibly hours), rebooting one or more times without you touching anything.
10. When it is done installing and rebooting, it will ask for a Product Key. Uncheck the box for "Automatically activate when online", enter the Key, and click Next.
11. Enter the Key, then go to my "INSTALL & CUSTOMIZE WINDOWS 7" checklist.

FOLLOWUP:

1. **OUTLOOK EXPRESS:** To move your Outlook Express Account into Windows Live Mail, go look in the WINDOWS LIVE MAIL section of the “WINDOWS 7 TIPS” sheet at www.jimopi.net.

WINDOWS 7 EASY TRANSFER TOOL TIPS:

1. **GENERAL:** This Tool moves all your data, and also will move all User Account information, Windows settings, Browser favorites, etc. Plus it will make the Desktop on your new Windows 7 PC look very much like your old XP/VISTA/Win7 Desktop.
 2. **MALWARE:** Before running the Tool on the old PC, be sure to run a set of FULL Malware scans on it. I especially recommend using MalwareBytes AntiMalware and SuperAntiSpyware (both free). Much of your data could be infected, especially in the "Downloads" folder.
 3. **IMAGE BACKUP:** It is a good idea to do an image backup on the new PC before starting this in case something goes wrong.
 4. **DOWNLOADING THE TOOL:** for XP, download the Easy Transfer Tool from Microsoft:
<http://windows.microsoft.com/en-US/windows7/products/features/windows-easy-transfer>
 5. **FIREFOX, THUNDERBIRD AND OTHER 3RD PARTY PROGRAMS:** WARNING: By default, the Easy Transfer Tool does NOT move the 3rd party settings and Application data used by Firefox favorites and Thunderbird mail and other programs. You must manually tell the Tool to select the desired folders. In XP, they are stored here for each User in: C:\Documents and Settings\ - a. In the Easy Transfer Tool, click on "Customize" under the desired User Account. Then click "Advanced". Check the boxes for the desired folders: IE: Mozilla (for Firefox), and Thunderbird.
 - b. Here is step by step tip on how to tell the Easy Transfer Tool to save the needed folders for Firefox and Thunderbird.
<http://www.kombitz.com/2009/04/18/how-to-use-windows-easy-transfer-to-transfer-firefox-and-thunderbird-profiles-on-windows-7/>
 - c. If you are copying from a Vista or Windows 7 system, the folders can be found in C:\Users\ - d. If you have any other needed 3rd party application data folders, check them now also.
6. **TRANSFER METHODS:** There are three ways to use the Windows 7 Easy Transfer Tool:
 - a. "USB HARD-DRIVE" METHOD:
 - 1) First, run the Easy Transfer Tool on the "OLD" XP System backing up to a USB Hard-drive.
 - 2) Then attach the Hard-drive to the "NEW" Windows 7 System and run the Easy Transfer Tool.
 - 3) NOTE: I RECOMMEND AND USE ONLY THE USB HARD-DRIVE METHOD. *I do NOT recommend using the other methods. They both add a level of complexity to the process because both PC's must be running and talking to each other at the same time. The Hard-drive method only runs one PC at a time so there are fewer potential complications*
 - 4) TUTORIAL: This is a great step-by-step guide called: "Migrate XP to Windows 7 with Easy Transfer and a USB Drive":
<http://www.howtogeek.com/howto/3179/migrate-xp-to-windows-7-with-easy-transfer-and-a-usb-drive/>
 - b. "NETWORK" METHOD: Connect the two PC's via a local Network (Router).
 - c. "EASY TRANSFER CABLE" METHOD: Connect the to PC's via an "Easy Transfer USB Cable"
7. **BACKING UP FROM AN UNBOOTABLE SYSTEM:** The Easy Transfer Tool requires that the old XP PC be booted and up & running. Also, you cannot mount the old drive on the new PC as a slave to automatically recover data and settings. You can only do it manually. NOTE: *I have successfully migrated an unbootable XP system by mounting the unbootable drive in the Windows 7 system as a slave drive and backed up the XP Data and settings using Fab's Autobackup 4 Tech, so give that a try if the old PC is broken.*
8. **PASSWORDS:** If any User Accounts on the old PC have password protection, you will need enter those passwords during the migration process. If you already had a password on the Win 7

Account into which you migrated, it will remain the same. If you did not have a Password on the Win 7 Account, it will still not have one after the migration even if the Account on the old PC did have a password. You can add it manually if desired.

9. **ACCESSING XP/VISTA USER FILES ON THE OLD PC:** Make sure to run the Tool from an Administrator Account, not a Limited User Account. By default, the Easy Transfer Tool will move the settings and files for all User Accounts on the old PC. If during the run on the old PC, you cannot access the "My Documents" folder (or other folders) of another User, you may have to run a separate pass of the Utility from that User ID to access those files. Also, if a "My Documents" folder on the old PC is set to "Private", you can either run the Easy Transfer Utility from that User ID or first change the status of that folder to not be private.
10. **MAPPING USER ACCOUNTS ON THE NEW PC:** When running the Easy Transfer Tool on the new PC and you get to the window: "Choose what to transfer", be sure to click the "Advanced Options" button and map the the User Account Names from the XP/VISTA system to the desired Account names on the new PC. This tells the wizard which XP/VISTA Account User settings go into which Windows 7 Account Names and creates any new User Names that are needed.
11. **MALWARE WARNING:** If any of the files to be transferred are infected, then the Easy Transfer Tool will transfer that malware to the new PC. *There is no way to virus scan the .MIG archive file.* You should clean the old PC first and/or scan the new PC after the Tool is run.
12. **XP SECURITY WARNING:** When the Easy Transfer Tool creates new Accounts, by default they are "Administrator" Accounts because that is what they all were in XP. After Easy Transfer is completed, be sure to manually change all User Accounts to "Standard" except the main "Admin" User. (*Control Panel > User Accounts*)
13. **REPORTS:** When the Utility is done, it creates a report of what was transferred as well as a list of programs that you may need to install under Windows 7. If you want to look at the report later, enter this in the Start > Search box: Windows Easy Transfer Reports.
14. **ENCRYPTED FOLDERS:** If you have encrypted folders on the old PC, I suggest you un-encrypt them prior to starting this process. You can then make them encrypted again in Windows 7.