

MOVING TO MICROSOFT WINDOWS VISTA

A WHITEPAPER PRODUCED BY ALLEGIANCE TECHNOLOGY PARTNERS, INC.

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VISTA REQUIREMENTS

Read through the requirements below and then hook up all the devices you want tested to your computer (printers, scanners, external hard drives and optical storage, etc.) and run the Windows Vista Upgrade Advisor. This is a program from Microsoft that scans your entire system and attached peripherals and gives a report of which products are compatible with Vista and how to resolve issues when incompatibilities exist.

Visit the Microsoft Vista Upgrade Advisor web page:

<http://www.microsoft.com/windows/products/windowsvista/buyorupgrade/upgradeadvisor.mspx>

Here are the requirements for Vista Business and Ultimate. To learn more about the specific feature differences between Business and Ultimate, go here:

<http://www.microsoft.com/windows/products/windowsvista/editions/choose.mspx>

- 1 GHz 32-bit or 64-bit processor
- 1Gb RAM memory
- 40Gb hard drive with at least 15Gb of available space
- Support for DirectX9 graphics with:
 - WDDM Driver
 - 128 Mb of graphics memory (minimum)
 - Pixel Shader 2.0 in hardware
 - 32 bits per pixel
- DVD-ROM drive
- Audio output
- Internet access

Processor

Simply stated, you must have a processor of at least 1 GHz. This is not a problem on all but the oldest Tablet PCs but would be an issue on some more recent UMPCs. As an example, the Motion M1400, a 4 year old tablet, had a 1.1GHz processor and could run Vista.

Memory

One gigabyte of system memory has been the minimum memory we've recommended for some time even for running Windows XP Professional. Vista users will want to maximize the amount of RAM in their system with 2 GB becoming the new standard. Core Duo tablets utilizing dual channel RAM will be able to support up to 4 GB RAM memory and this level is recommended for persons who are using media intensive applications or for gaming.

Hard drive

While you can install Vista on any machine that has at least 15GB free, you may want to upgrade to at least 80GB. You'll need the room if you upgrade to any new Vista-optimized programs.

Vista requirements continued

Graphics

If you have integrated graphics or a DX9-capable graphics card (most slates and UMPCs have integrated graphics, some convertibles have higher end graphics cards), it is likely that you can use Vista in its basic form, without all the fancy Aero effects. If your graphics card has at least 256MB of dedicated graphics memory, Aero will work fine for you.

DVD-ROM

Vista upgrades can be purchased as a download from the Microsoft website (<http://www.windowsmarketplace.com/>) or you can request to be mailed DVDs. Obviously, if you ask for the DVDs, you will need a DVD reader to load them. Your tablet doesn't have to have an internal DVD; it can connect to one through a USB or FireWire port. This allows you to load Vista onto slate tablets and UMPCs that don't have an internal optical drive.

(Note: Some tablet PCs only support booting to proprietary optical drives. Check with your reseller or the manufacturer if you need to purchase a specific optical drive.)

Audio Output and Internet Access

If your computer doesn't come with both of these, it's time to go to www.alltp.com/store :-)

AM I ELIGIBLE FOR THE FREE (OR LOW COST) VISTA UPGRADE?

Any computer purchased with a Windows operating system since October 26th, 2006 is eligible for the free Windows Vista upgrade **provided the manufacturer is participating in the Microsoft free upgrade program**. The "low cost" is \$9.99 if you need the DVDs to load the software.

If your computer did not come with an Upgrade Redemption Form, you will need to have the following information available to get the upgrade:

- Date of purchase
- Certificate of Authenticity (COA) number (the 14 digit number from the sticker on the back of your computer)
- Make and Model of your computer (e.g. Fujitsu P1610)
- Your computer's serial number (generally on the back of the computer)

Microsoft says it will take 6-8 weeks to get the DVDs to you.

Here is the link to Microsoft's website for obtaining your upgrade:

<https://upgradeweb.moduslink.com/Vista/ConsumerWebsite>

WHY UPGRADE TO VISTA?

Vista is widely reported to be the most stable Microsoft operating system release to date. This comes not only from the usual pundits but from reviewers who really beat on the software and hardware as they write articles for their readers.

One thing that can be said for Vista is that it really incorporates significant improvements for tablet PC owners and truly extends the pen and ink capabilities of the platform. Some, like seeing the screen “dimple” when you tap on it, are subtle but make the daily experience of using a tablet PC even better. Others, like the handwriting recognition tool, take not-so-subtle cues from voice recognition software and provide a way to dramatically improve the likelihood that the Tablet Input Panel (TIP) will recognize your handwriting – the more you use it the better it gets.

Here is a general overview of Vista features that directly affect Tablet PC users. The ones in the beginning are those most likely to provide the most noticeable benefits.

Handwriting recognition improvements

Being able to personalize the handwriting recognition in Windows Vista increases the ability of the TIP to successfully translate a person’s writing. Every individual holds the pen differently, prints differently, connect the letters in their script differently and it is amazing that the Windows XP TIP could be able to recognize writing without training. With the addition of personalization, Vista adapts the user’s own style and makes recognition more likely by direct reporting of errors when they occur. Also, custom recognizers can be created for other languages or shapes, giving hope to those who use symbols as part of their everyday work.

Automatic learning

This goes hand in hand with handwriting recognition, but is a “behind the scenes” learning of an individual’s writing style without requiring one’s interaction. Automatic learning simultaneously creates a dictionary that adds new words from your documents and email. There is great benefit for people whose writings are filled with industry jargon, abbreviation and acronyms because these are automatically.

TIP tab

Keeping the Tablet Input Panel out of your way without having to dock it or reposition it has long been a detractor from the tablet PC experience. The TIP tab gives users a new way to open and position the TIP on the screen. When the TIP is closed, the tab appears on the left edge of the screen (default setting – you can change this). When you tap it, the TIP slides out from the edge of the screen and you can use it. When you are done, tap it again and it slides out of the way once more. You can also reposition where the hidden TIP is position on the edge of the screen so that it slides out at the same place when you tap it. This is a seemingly simple feature but one that will make working with the Tablet Input Panel much more convenient.

Improved erasing

Once you've gotten used to having an eraser on your tablet pen, you expect to be able to use it anywhere. That wasn't true in the TIP because the eraser just added ink. The scratch out gesture (moving the pen back and forth horizontally three times to erase) is fine but takes some practice and is a challenge for new users. With the Vista TIP, eraser equipped pens can remove ink directly. Also, the scratch out gesture itself has been improved, allowing people to scratch ink out without having to draw perfectly horizontal lines.

AutoComplete

While sometimes using the keyboard version of AutoComplete can be annoying when it unintentionally creates a word you weren't intending, the majority of the instances it is a big time saver. Now that functionality is built into the Tablet Input Panel. Basically, as you start to write, AutoComplete lists a series of possible matches based on text you've entered previously and gives you the opportunity to pick that entry without having to complete writing the word or phrase or URL. Very nice.

Pen Flicks

It's very possible that pen flicks could have been higher on our list of important improvements to the tablet PC experience. Simply stated, pen flicks are shortcuts for navigation and editing that allow you to move around the screen and documents as well as copy, paste, delete and undo without having to go through multiple steps and pen clicks. Pasting an item doesn't require you to right click, select paste, then left click – you can do all that with a simple 'flick' of the pen. Another feature is the ability to customize pen flicks for your own shortcuts.

Visual feedback

It can be frustrating for new users to know when they have successfully double clicked on a program they want to open or when they have properly hit the X to close an application. Using the pen on the tablet screen in Vista provides visual cues that lets users know when they have successfully single or double clicked or right clicked. While subtle, this feedback creates a much more comfortable feeling right out of the box.

Touch screen improvements

The relevance of the feature will increase as more tablet PCs come equipped with dual function displays – ones that have both the capabilities of an active digitizer and a touch screen. As go pen flicks, so goes touch flicks on a passive digitizer, enabling you to navigate applications and use shortcuts with a finger or stylus. With a lot of ultra mobile PCs, the small screen size creates challenges in successfully targeting small icons or when attempting to resize a window. The Windows Vista touch pointer floats on the screen just below your finger and has left and right mouse buttons, a drag area and a pointer for overcoming the challenges of tapping small buttons with big fingers.

Snipping Tool

The Snipping Tool, long a great add-in for tablet PC users, allows one to draw around an area of the screen and 'snip' it. The object can then be pasted into an email or other document or saved as a file. It is now incorporated directly in the Vista operating system rather than being a separate application.

Voice Recognition

Microsoft is touting a greatly improved voice recognition engine in Vista. While tablet users could use voice recognition previously, it did not have the robust tools for error correction and training that can be found in Dragon Naturally Speaking. For those looking to give voice recognition a try, this may be a significant feature.

UPGRADE VS. CLEAN INSTALL

Courtesy of the GottaBeMobile forums and Benjamin Ries, here is the best guidance regarding an upgrade or clean installation. Allegiance Technology strongly advises to perform a clean installation.

There have been posts across many sites regarding Microsoft's policy vis-à-vis new restrictions on installation options for Vista Upgrade licenses.

After reading everybody's material, I think a lot of reviewers and publishers are getting confused between different definitions of "upgrade" and "clean install". All the correct info is in the original Microsoft article: <http://support.microsoft.com/default.aspx/kb/930985/en-us>

Fact: *If you purchase a Vista Upgrade license (cheaper than the standalone version; requires license to previous version of Windows) you will be required to have your old version of Windows installed and running on your PC at the time of the Vista upgrade. This is different than past upgrade procedures, where you could start with a blank drive and only be required to insert a CD copy of your previous Windows version before proceeding with the new installation.*

Why? *Because with Windows Activation (introduced with XP), proving ownership of a prior Windows license requires much more than the physical disk, which anybody can download and burn these days. Last time around, a Windows 95/98/2000 disk and CD-KEY were literally as good as a working installation in terms of establishing license ownership.*

Fact: *A "clean install" is generally better than an "upgrade install" - greater stability, no inherited bugs or files from last OS, etc.*

Myth: *That an "upgrade install" is your only option when you buy a Vista Upgrade license.*

Why? *Because on any Vista disk - whether a standalone or upgrade license - the install procedure will give you two options: (a) install Vista "on top" of the existing OS, or (b) clear existing files and THEN do a "clean install" of Vista.*

The only difference, as far as I can tell, is that Vista requires you to begin with your old OS installed (and if XP, activated) before you start the Vista install. Once it verifies your existing Windows license, you can decide how the installation should proceed (upgrade or clean install). In fact, if your old OS is older than XP or the SKU doesn't match up, clean install is your only option! (<http://arstechnica.com/news.ars/post/20060730-7384.html>)

*So **yes**, this is a minor pain in that you can't begin with a blank hard drive. But **no**, you don't have to do an "upgrade install" of Vista. The installation menu always provides "clean install" as an option. So there's no real need to go through an XP install first unless you've got a brand new hard drive - you can start from your currently bugged up, fundamentally flawed XP partition and end up with a "clean install" of Vista.*

SHOULD I WAIT FOR VISTA SERVICE PACK 1 BEFORE UPGRADING?

For previous version upgrades of the Microsoft operating system, this was standard advice and wisely followed. While people who depend on their tablet PC for daily business use should be wary about jumping in quickly on any change, the extensive testing of the Vista OS along with the significant benefits for tablet users should provide comfort for early adopters. As with any upgrade, you should carefully back up all your files and also read the manufacturer's advice on upgrading to Vista. The biggest risk now seems to be incompatible device drivers and applications but most manufacturers have had time to do extensive testing. If the Vista drivers are listed on the PC maker's website then you should feel confident that they will work for you. If you have any concerns about a driver or application, contact the company before upgrading to ensure that you have the most recent Vista ready driver and software updates.

HELPFUL LINKS

Windows Vista Home Page

<http://www.microsoft.com/windows/products/windowsvista/default.mspx>

Vista Upgrade Advisor

<http://www.microsoft.com/windows/products/windowsvista/buyorupgrade/upgradeadvisor.mspx>

Tablet PC Features in Vista

<http://www.microsoft.com/windows/products/windowsvista/features/details/tabletPC.mspx>

Places to read discussions of upgrades, compatibility and general Vista information:

Windows Vista Team Blog

<http://windowsvistablog.com/>

GottaBeMobile.com

<http://www.gottabemobile.com/>

jkOnTheRun

<http://jkontherun.blogs.com/jkontherun/>

Ultra Mobile PC Tips

<http://ultramobilepc-tips.blogspot.com/index.html>

TabletPC2

<http://www.tabletpc2.com/>

TabletPCBuzz

<http://www.tabletpcbuzz.com/>