Installing Windows Vista: The good, the bad, and the ugly

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Installing Vista as an upgrade to Windows XP or as a fresh installation is a fairly straightforward procedure, but you might encounter a couple of gotchas along the way. To show you what you may encounter, we'll walk you through the process using the public beta (Beta 2). Note that although there are later interim builds available to specific groups at the time of this writing, they have not been made available to the general public.

Image-based installation

The first thing to note is that the Vista installation is image based. In other words, the installation DVD contains a compressed image of the operating system, and it's decompressed onto your hard disk when you install it. This is built on Microsoft's Windows Imaging Format (.WIM) technology. For more information about the technical aspects of this new type of installation, see "Build your own Vista install DVD."

Tip

If you're installing Vista in a VPC VM, note that the .ISO image is larger than the 2.2 GB limit, so VPC won't recognize it as valid. The solution is to either burn a DVD and install Vista from it or use third-party software such as Nero 7, which has an option called DriveImage that will make an .ISO image appear to be a physical drive. In the VPC menu, click CD and then select the physical drive letter assigned to the image.

Where to install

If you're installing a beta version of Vista, you have to remember that everything may not work as it should; that's the nature of the beta beast. Thus, rather than plunge in and upgrade your XP computer to Vista, you might want to consider a more conservative option, such as:

- Install Vista in a virtual machine using Microsoft's Virtual PC or VMware on your XP host machine.
- Install Vista in a dual-boot configuration in a separate partition from your XP installation so you can boot back into XP if you want.

You can find some tips for installing Vista in a VPC VM here. For instructions on installing Vista in a VMware VM, see "Choosing and Installing Guest Operating Systems : Windows Vista Beta." And this article explains how to dual boot XP and Vista with the help of Partition Magic.

If you're really adventurous, you can even install Vista on your Macintosh, in a dual boot with OS X, using the Bootcamp utility. There's more about that here.

System requirements

Your first step is to make sure the computer meets the minimum system requirements. Microsoft's recommended minimums include:

- 800 MHz processor (can be 32 or 64 bit)
- 512 MB RAM
- 20 GB hard drive space with 15 GB free

For best performance, we recommend at least 1 GB of RAM. If you're installing in a VM, it's best to allocate at least 768 MB of memory to the virtual machine. If you plan to install a number of applications on the same partition where you install the operating system, we recommend that you have at least 25 GB free.

Starting the installation

If you're doing an upgrade installation, disable your antivirus software before beginning the installation. Otherwise, you may find that the computer stops responding and hangs during the installation process. When you do a fresh installation from the bootable DVD, Windows will load some files, and the Vista installation splash screen will appear within a few moments. You'll see two links on this screen:

- Release notes and advanced installation instructions
- System recovery options (for repairing an installed instance of Vista)

The system recovery option allows you to select from several recovery tools, including Startup Repair (fixes problems that prevent Windows from starting), System Restore, Windows Backup Disaster Recovery, Windows memory diagnostic tool, and the command prompt window.

To begin the new Vista installation, click the Install Now arrow, shown in **Figure A**. You'll get a *starting installation* message for a few moments.

Figure A: To begin installing Vista, click the Install Now arrow.

You'll be asked to enter your product key on the next screen. Here, you can also deselect the check box to automatically activate Windows when you're online if you want to wait. The next screen contains the EULA, which you must accept to continue the installation process.

On the next screen, you can select whether to do an upgrade installation or a custom (advanced) installation. If you're installing fresh to a clean partition, the first option will be grayed out, as shown in **Figure B**.

When you select a custom install, you can then designate the partition on which you want to install Vista. You can also delete, format, or extend an existing partition or create new partitions from unallocated space, as shown in **Figure C**. If you create a new partition, you'll need to format it. This may take awhile.

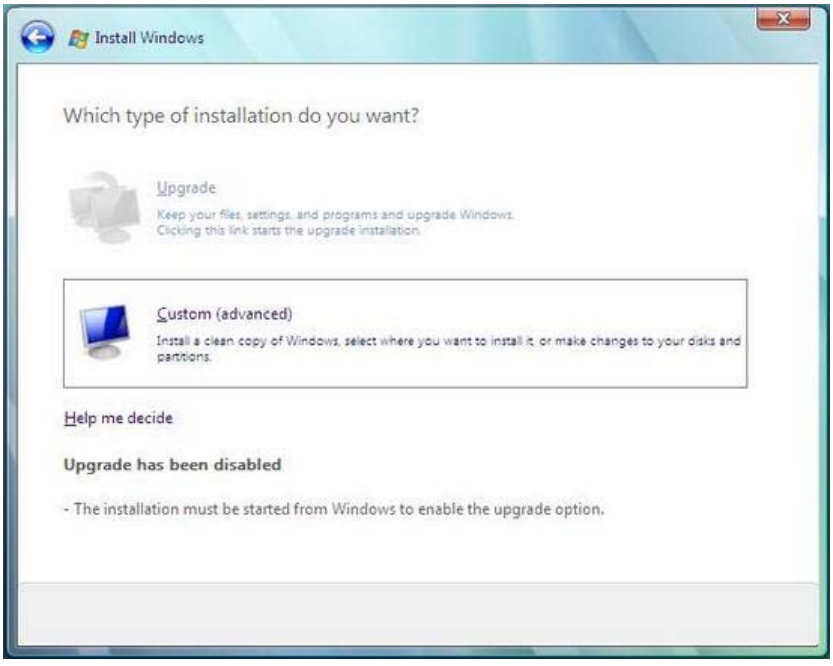

Figure B: If there's no upgradeable operating system installed, the option to upgrade is disabled.

Tip

In the public Beta 2 (build 5308), if you're installing in a VPC VM to a new virtual disk, Vista Setup may not recognize your disk and you may get a message that says to reboot and ensure that your disks are enabled in the BIOS. If you reboot and start Setup again, the disk should be recognized. You'll have to go through entering the product key all over again.

Windows will begin installing automatically. You may have to wait awhile, and the computer will restart itself during the installation process. What you see depends on the beta version you're installing.

During the second phase of installation with the public Beta 2, you'll see a *Completing installation* message after the system reboots and a warning not to restart your computer, as shown in **Figure D**.

The second phase of installation can take a very long time, especially if you're installing into a VM. Patience is not just a virtue; it's essential in this case; it can take as much as two hours to complete the installation in VPC.

If you're installing interim build 5472, the Installing Windows screen looks a bit different. You actually get some information showing the progress of each part of the installation process. This is a welcome change.

After the installation completes, the interactive part of Setup begins. During Setup, you create a user account with administrative privileges. You'll enter a username and password, and you can choose a picture to represent the account. You can create the account with a blank password, but that's not recommended for best security since this is an administrator account. The user name and picture screen is shown in **Figure E**.

On the next screen, you enter a computer name to identify the PC on the network.

The next screen allows you to configure automatic updates. The default is to use recommended settings, which means:

- Updates will be downloaded and installed automatically when they become available.
- The Windows Defender anti-spyware tool will be enabled.
- You become a member of Microsoft's SpyNet network.
- Windows will automatically send reporting information when errors occur.
- Windows will automatically check for the latest hardware drivers when you add new devices.

Alternatively, you can select to install important updates for Windows only. If you choose this option, you don't get the spyware protection and driver software. Finally, if you don't want to turn on any of the recommended protection settings, you can choose Ask Me Later.

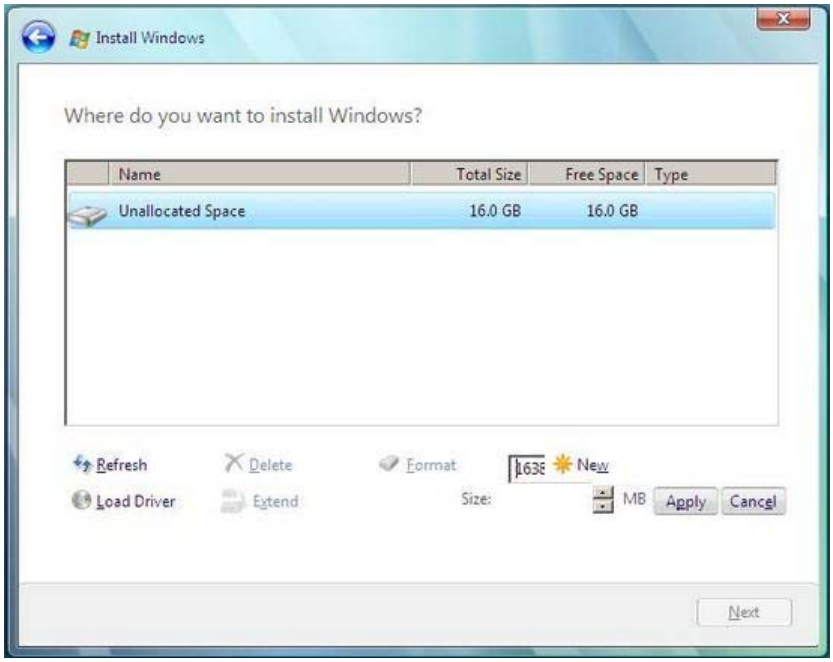

Figure C: You can delete, format, extend or create partitions within the setup tool.

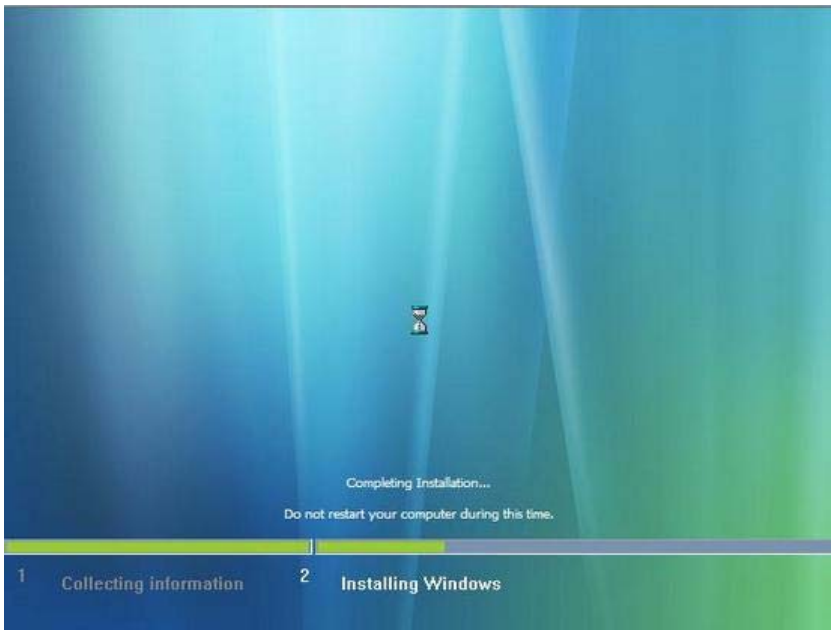

Figure D: Don't restart the computer during the second phase of installation.

Tip

If you install Vista in a VPC VM, be sure to install the Virtual Machine Additions. Otherwise, you'll be limited to 256 colors and extremely slow performance. To install the additions, first click CD in the top menu and select Capture CD. Then, click Action and select Install Or Update Virtual Machine Additions.

On the next screen, you set your time zone and the current date and time. This page includes a nifty analog clock with a second hand, as shown in **Figure F**.

After you've entered these settings, you'll be told to wait while Windows checks your computer's performance. Then, you'll see a black screen for a few moments, followed by the Vista logon screen with the account you created, ready to log on, as shown in **Figure G**.

The logon screen also includes a shutdown button (the red button on the right), which you can use to shut down or restart, and the Ease Of Access button, which lets you select accessibility options:

- **Narrator:** To hear text on the screen read aloud
- **Magnifier:** To make items on the screen appear larger
- **High contrast:** To obtain better visibility
- **On-screen keyboard:** To type without using the physical keyboard
- **Sticky keys:** To allow you to press shortcut combinations one key at a time
- **Filter keys:** To ignore extra key presses

The first time you log on, it may take awhile for Vista to prepare your desktop. You'll receive messages as your personalized settings are being prepared. After your personalized settings have been configured, you'll see your Vista desktop.

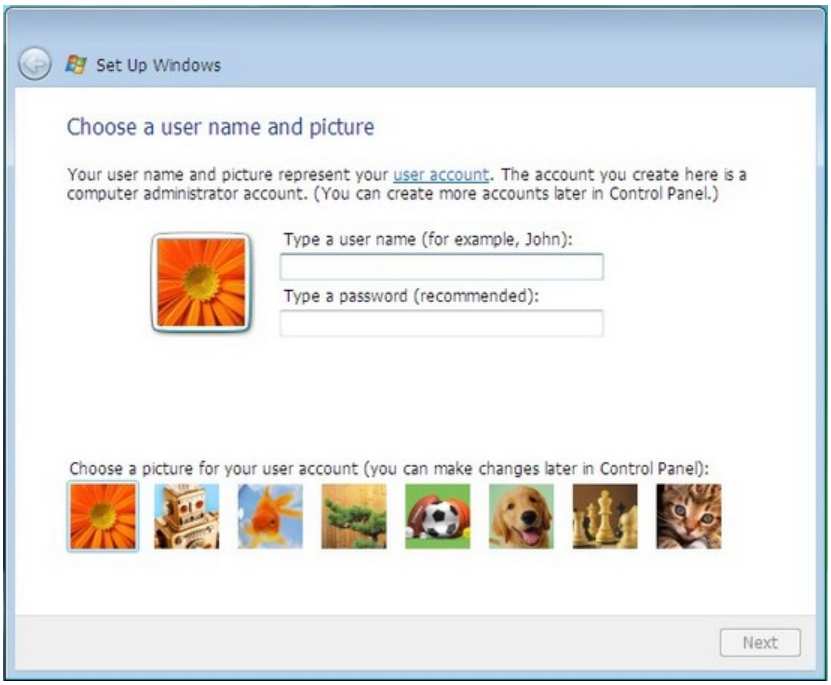

Figure E: You must create an administrative account during Setup.

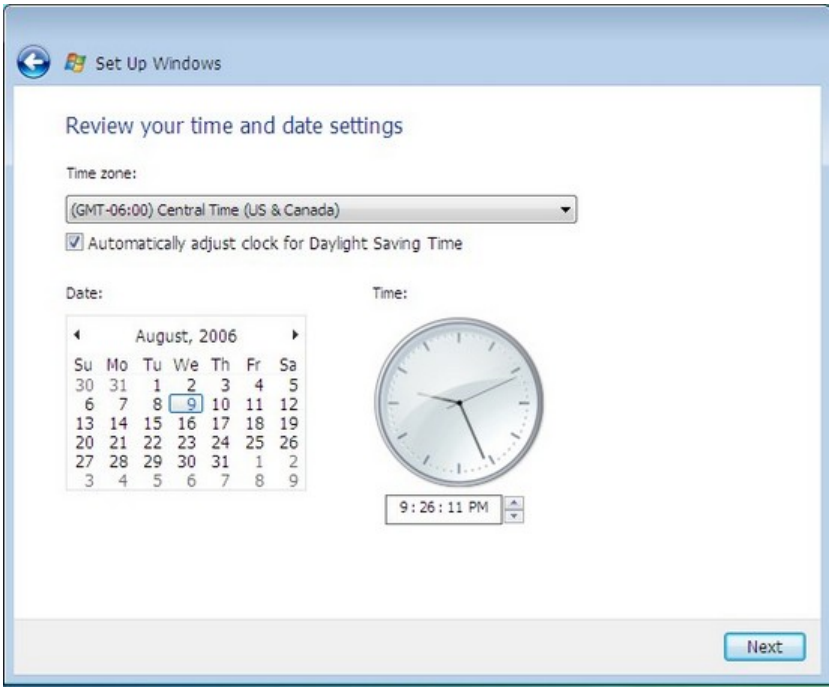

Figure F: Set the time, date and time zone in a spiffy new interface.

Dual-boot options

A popular way to install Vista is in a dual-boot configuration with Windows XP. This way, you can boot into whichever operating system you want by selecting from the boot menu. By default, the Vista boot menu will name your XP installation Previous Version Of Windows. You can change this, but the boot menu information in Vista is stored and edited differently from what you may be used to with the Windows NT, 2000, and XP/2003 boot information.

Tip

If you're booting multiple operating systems on the same machine, the previous versions of Windows continue to use boot.ini, and the BCD registry works in conjunction with their boot.ini files.

Editing the BCD store

The boot.ini file has been replaced by the Vista boot configuration data (BCD) store. You can edit it using the bcdedit.exe command-line tool that's located in the Windows\System32 folder.

On BIOS-based computers, the BCD registry is located in the \Boot\Bcd directory. If you have an EFI (Extensible Fireware Interface) system, the BCD registry is on the EFI system partition. You must be an administrator to use the bcdedit tool to make changes to the BCD registry.

You can still make some changes to the BCD information through the GUI without editing the BCD store directly, as you could in Windows XP. In the System applet in Control Panel, click Advanced System Settings in the left Tasks pane and enter administrative credentials (or click Continue if you're logged in as an admin). Click the Advanced tab and then click the Settings button under Startup And Recovery. Here, you can change the default OS and the time to display the list of operating systems before booting into the default OS, as shown in **Figure H**.

Figure G: Now you can log on with the account you created during Setup.

Third-party BCD editing tool

To make it easier to edit the BCD information, you can use a third-party tool such as VistaBootPRO, which is currently available as a free beta download at http://www.pro-networks.org/vistabootpro/. This is a graphical utility that lets you make such changes as renaming the operating systems in the boot menu. It can also back up and export the boot configuration information, and you may find it easier to work with than the command-line tool.

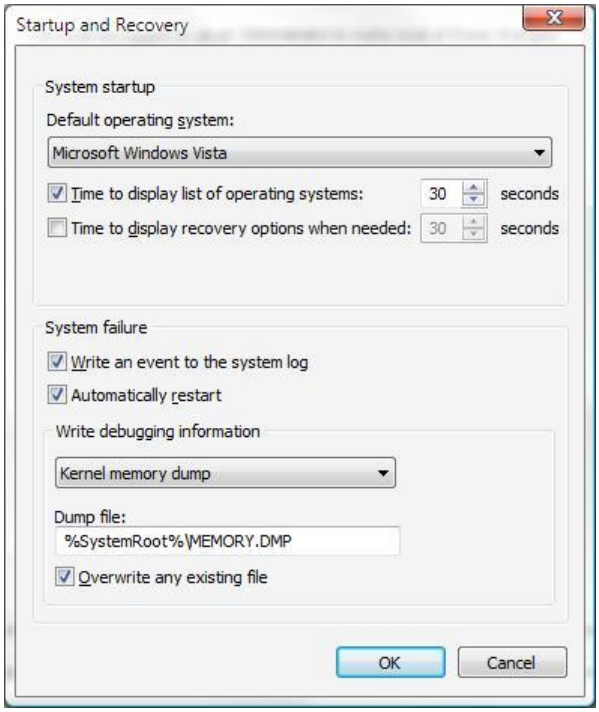

Figure H: You can change the default OS and time to display the OS list through the GUI.

The morning after

Especially if you're installing Vista in a VM, you may literally have to let the install routine run overnight. In any event, once Vista is installed, you may need to update drivers (especially video drivers) before everything works properly. If you've upgraded XP to Vista, you may find that some of your programs don't work. You can try running them in XP compatibility mode by using the Program Compatibility Wizard, show n in **Figure I**.

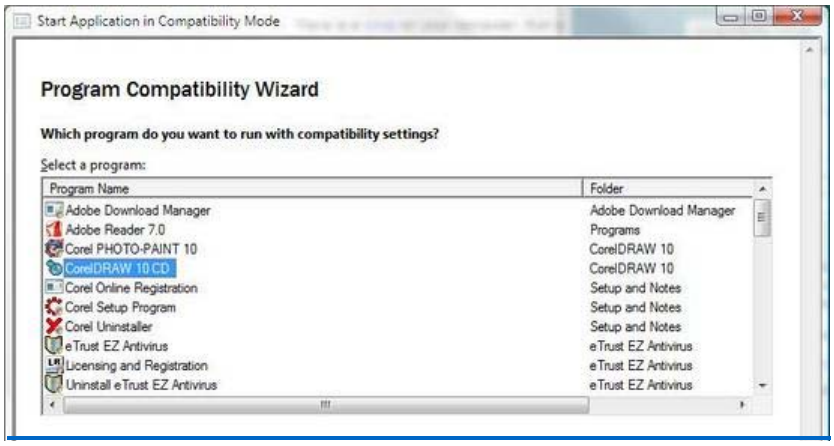

Figure I: The Compatibility Wizard may help you resolve some issues with nonworking programs.

You can access the wizard via the Help menu or by right-clicking the program's icon, selecting the Compatibility tab, and then choosing the operating system mode you want the program to run under (for example, Windows XP Service Pack 2). On this tab, you can also opt to run the program as an administrator, which may be required for some programs to work. If this doesn't help, try reinstalling the program.

Additional resources

- TechRepublic's Downloads RSS Feed XML
- Sign up for TechRepublic's Downloads Weekly Update newsletter
- Sign up for our Windows Vista Report newsletter
- Check out all of TechRepublic's free newsletters
- "Aero Glass: Is it all it's cracked up to be?" (TechRepublic article)
- "Get an in-depth look at Vista firewall's advanced configuration features" (TechRepublic download)
- "What you need to know before you upgrade to Windows Vista" (TechRepublic download)

Version history

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