

Chapter 1

What's New in Windows Vista

Welcome to Vista! This chapter is for people who have experience with Windows XP or other versions of Windows and just want to know what's new. If you're new to PCs, this chapter won't help much because everything will be new to you. So feel free to skip this chapter and head over to Chapter 2 if you're not a long-time Windows user.

For the folks who do stick around here, the first thing you need to understand is that Windows Vista is more than just a new "version" of Windows. It's not just Windows XP with eye candy. It's a whole new operating system, inside and out.

But that doesn't mean you have to throw away all your existing hard-earned knowledge. In fact, you don't have to throw away any of that, because the old familiar ways of doing things still apply. You just have to be ready to expand your horizons to bigger and better things.

If you're like most people (myself included), your first inclination might be to get out of Vista as quickly as possible and return to a more familiar environment, like Windows XP. But if you do that, you'll be missing out on many new features and improvements. If you invest a little time in learning what's new and different, you'll find that you really *can* get things done more quickly and easily in Vista. This chapter provides a quick overview of what's new, so you can decide for yourself which features are most relevant to how you use your computer.

NEW FEATURE The new Aero Glass interface provides a more intuitive interface that better reflects how things are stacked up on your desktop.

A New Look and Feel

The most obvious (though certainly not the most important) new feature is the Aero Glass interface. Windows users have been using a 3D interface for years. You can open as many programs as you want, and they stack up like sheets of

IN THIS CHAPTER

A new look and feel

Quicker, easier navigation

Built-in security and parental controls

A better Internet experience

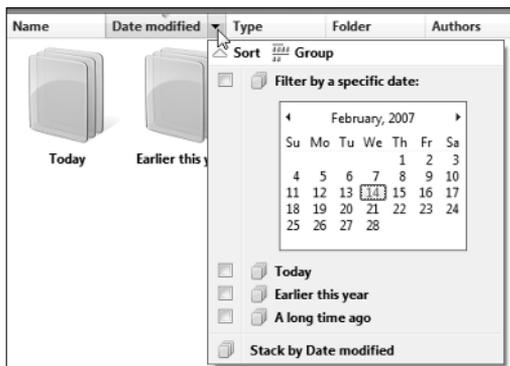
And so much more

paper on a desktop. It just wasn't very obvious that you were using a 3D interface with items stacked up on your desktop.

Aero Glass changes that by making the borders around program windows semitransparent, so you can see when there's something behind whatever you're looking at. Aero also adds a little drop-shadow around the window border to make it look more raised. Figure 1.1 shows a small example. But it's much more noticeable on the actual screen.

FIGURE 1.1

Sample Aero Glass windows.



Flip 3D

Along with the 3D appearance of Aero Glass comes a new way to take a quick look at all your open program windows. The old ways of doing things still work. For example, you can click the Show Desktop button in the Quick Launch toolbar to minimize all open program windows. You can still use the Alt+Tab shortcut key to switch between open programs. For the new alternative method, press Win+Tab or click the Switch Between Windows button in the Quick Launch toolbar. Either way, all your open windows arrange themselves as in Figure 1.2.

When displayed in 3D, you can cycle through the open windows by spinning your mouse wheel or by pressing the ↑ and ↓ keys. Click any visible portion of a window to bring it to the top of the stack.

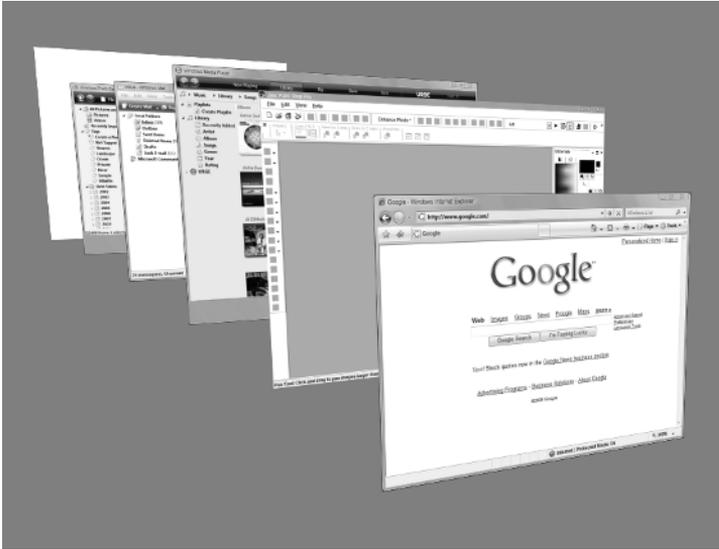
TIP

If your prior experience with Windows doesn't include a concept or term from this chapter, you can fill in the gap by reading Chapter 2.

Of course, you can still use the taskbar to bring any open program window to the top of the stack. Vista's taskbar is better than the old ones. As you point to each button, you see a thumbnail of the program window it represents (see Figure 1.3). That makes it really easy to find exactly the program for which you're looking. Pressing Alt+Tab displays thumbnails, which is a lot better than seeing only icons! And that works even if you don't have Aero Glass.

FIGURE 1.2

Flip 3D in action.

**FIGURE 1.3**

Point to a taskbar button for thumbnail.

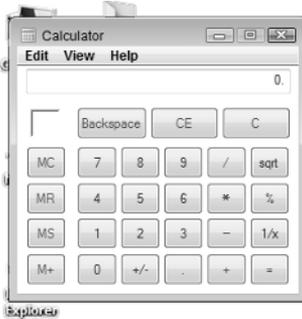


Why don't I have Aero Glass?

Aero Glass isn't available on all computers because it requires some heavy-duty graphics processing. More specifically, you need a graphics card that supports the Windows Display Driver Model (WDDM). If your computer doesn't have the necessary graphics hardware, you won't get the semitransparent look, the dropshadows, or the Flip 3D option. But other than that, the rest will look and act roughly the same. For example, the window in Figure 1.4 is displayed with Aero Glass turned off.

FIGURE 1.4

Program window without Aero Glass.



What if I don't like Aero Glass?

If you have Aero Glass but don't like it, there are many things you can do to change its appearance. If you have Aero Glass, you can turn it on or off by pressing Ctrl+Shift+F9. Or, if you just want to tweak colors and transparency in Aero Glass, click the Window Color and Appearance in the Personalize window.

If you want an even more classic view of things, click Theme in the Personalize window. Then choose Windows Classic and click OK. (The Ctrl+Shift+F9 trick won't work in the Classic view. You'll have to choose the Windows Vista theme in the Theme dialog box and click OK before pressing Shift+Ctrl+F9 will work again.)

NOTE

For more information on personalizing Windows Vista, see Part III.

NEW FEATURE

Sidebar sets aside a portion of your desktop for live Internet data and other tools you might use often.

Windows Sidebar

Windows Sidebar lets you place *gadgets* on your desktop. Many gadgets hook into Internet services to keep you informed in real time. For example, there are gadgets for watching the weather, watching stock prices, and keeping up with headlines from your subscribed RSS feeds. Figure 1.5 shows the sidebar at the right side of the screen with a clock up top. The window in the middle is the Gadget Gallery from which you can choose the gadgets you want to use. You might have different gadgets. Not to worry. There are plenty of gadgets online that you can download for free.

If the sidebar gets in your way, you can put it into hiding until you need it. Or, you can turn it off completely and forget it even exists—whatever works for you. See Chapter 11 for the full lowdown on Windows Sidebar.

NEW FEATURE

Vista's Windows Explorer provides many new ways of viewing and navigating through folders.

FIGURE 1.5

Windows Sidebar and Gadget Gallery.



Quicker, Easier Navigation

Hard disk space is cheap these days, so everyone has a ton of it. Many people have thousands of files stored in all the space, organized into many folders and subfolders. Navigating up and down through folders all the time gets old. Vista has quite a few new tricks up its sleeve to help with that.

Probably the most important trick is the breadcrumb trail (also called an eyebrow menu) in the Address bar at the top of every folder. Some of you may recognize the concept from Web sites that offer similar navigation. In Vista's eyebrow menu, you can click the name of any folder you see in the trail to go to that folder. But there's much more to it than that. You can also click the arrow that appears next to any item in the trail to see other items at that same level in the folder hierarchy, like in Figure 1.6.

The eyebrow menu is worth its weight in gold. But it's not the only improvement. There's an optional navigation pane at the left side of every folder that contains quick links to common places. The links you see under Favorite Links are just examples. You can put links to any folders you like in there, and remove them just as easily. So you can constantly customize to reflect the folder you're using most.

The trusty Folders list is still available, too. You might not see it at first. To bring it up, just click the arrow next to Folders at the bottom of the navigation pane.

FIGURE 1.6

Breadcrumb trail and navigation pane.



Sizing icons

You're not limited to discrete views of icons anymore either. In any folder, clicking the arrow next to Views in the toolbar takes you to a slider where you can choose a view and also adjust the size of icons. If your mouse has a wheel, hold down the Ctrl key while spinning the mouse wheel to adjust the icon size to your liking.

Vista gives you more control over the size of desktop icons too. Right-click an empty portion of the desktop and choose View, then an icon size. Or, if your mouse has a wheel, click an empty portion of the desktop. Then hold down the Ctrl key as you spin your mouse wheel.

Sorting, grouping, and stacking

Across the top of every folder you'll see column headings. You can sort, group, search, filter, or stack items by any column heading. Just point to any column heading and click the arrow like the example in Figure 1.7.

If you want to sort, group, filter, or stack icons by something that's not in the column headings, no problem. Just right-click any column heading and add whatever column headings you need.

So what's a stack, you ask? Well, it's kind of like a stack of paper and kind of like a folder. It looks like a stack of paper, like the icons in Figure 1.7, but opens like a folder. When you open the stack, you see everything inside the stack. See Chapters 28 and 29 for the full story on all the cool things you can do in folders.

Previous versions and undelete

Have you ever made a mess of a file while editing it? Then you close the file, and out of habit choose Yes when asked if you want to save your changes? Thereby replacing your good copy with the one you just ruined! If that happens in Vista, it may not be a problem. Right-click the file's icon and choose Restore previous versions. The file's Properties sheet opens to the Previous Versions tab as in Figure 1.8. Then click the version you want to restore.

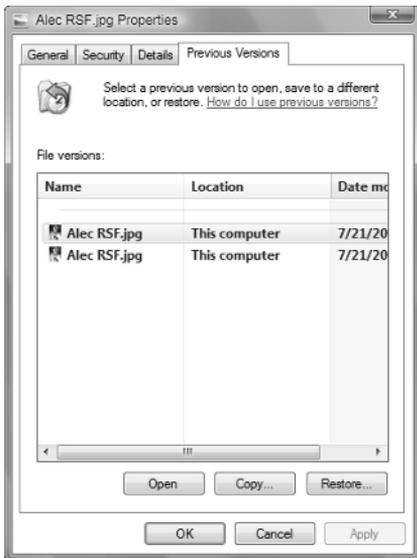
FIGURE 1.7

Sort, group, filter, or stack.



FIGURE 1.8

Previous Versions tab.



Have you ever accidentally deleted a file *and* emptied the Recycle Bin, making it impossible to recover the file? You can get those back in Vista, too. The trick is in knowing how. See “Using System Protection” in Chapter 33 for all the secrets.

NEW FEATURE If you have thousands of files and messages to manage, the new Search feature will greatly reduce the amount of time you spend finding and getting to things you use most often.

Search and Virtual Folders

The new navigation tools really help make it quicker and easier to get around. But when it comes to getting around quickly and easily, no navigation is better than improved navigation. That’s what Search and Virtual Folders (saved searches) are all about. To understand these features, you first have to erase from your mind any thought of “looking for lost items” or the Windows XP Search Companion. That’s not what Search is about in Vista.

In its simplest form, Search starts right at the bottom of the Start menu. If you know the name of a program or Control Panel applet you want to open, or some keyword associated with a document, person in your Contacts folder, or Windows Mail message, you don’t have to navigate at all to get to the item. Instead, open the Start menu by clicking the Start button or by pressing  or Ctrl+Esc. Then just start typing your search word. As you type, the Start menu shows items that contain the characters you are typing (see Figure 1.9). When you see the item you want, just click it.

FIGURE 1.9

Start menu search.



Search for tags (keywords)

The Start menu search is handy. But there's much more. Searching in Vista goes way beyond looking for lost files. You can search all your documents for "relevance" or "meaning" rather than just by filename. The searches are much quicker than in earlier versions because Vista's search doesn't slog through the whole file system every time you search. Instead it searches an internal index of filenames, file properties (tags and metadata), and document contents.

If you've used Media Player, you've already had a sense of how that works. In Media Player you can click a genre like Classical, and see all your Classical songs, no matter who the artist or what folder the songs are stored in. Likewise, you could click Artist and see all songs by a given artist, regardless of what folder each song is in. Windows Vista extends that capability from Media Player to all the files on your hard disk. And any external hard disks you have, too.

Searches in Vista don't slog through the whole file system looking at tens of thousands of irrelevant files along the way. That's too slow and tedious. Instead, Windows Vista searches through a *search index*. The index contains filenames, tags (keywords), and even the contents of messages and files. So when you search for something like "catwalk" you get all files that have that in the filename, tag, or even inside the document. And you get it much more quickly than you would in XP.

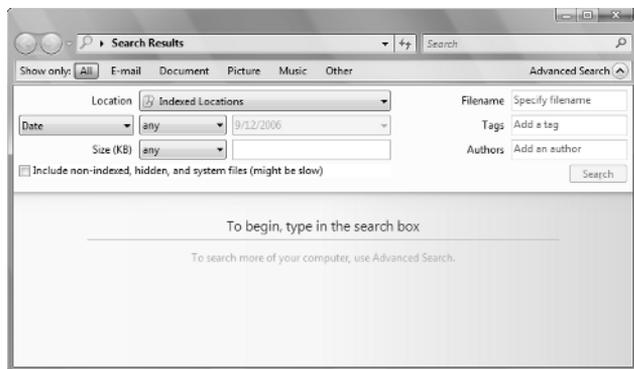
TIP

If you're familiar with online search engines like Google, then the best way to think of the new search feature is as a search engine for files and folders on your own computer. Because that's what it really is.

You can launch a search the old-fashioned way, by clicking the Start button and choosing Search. Use the Advanced Search options shown in Figure 1.10. Use the Location option to choose where you want to search. Use the other boxes to search by date, size, filename, tags, or other file properties.

FIGURE 1.10

Advanced Search.



You can also launch a search from the Search box at the top-right corner of any folder. But you have to be aware that those searches include only the current folder and its subfolders. Nonetheless, it's very powerful and useful because you're not limited to searching for filenames and wildcards. You can include specific file properties in your search criteria. For example, a search for `genre: rock` finds all files that have Rock in the genre property. A search for `to:hobart` finds all Windows Mail messages addressed to Hobart. A search for `subject:vista` finds all files that have Vista in the Subject property. The possibilities are endless.

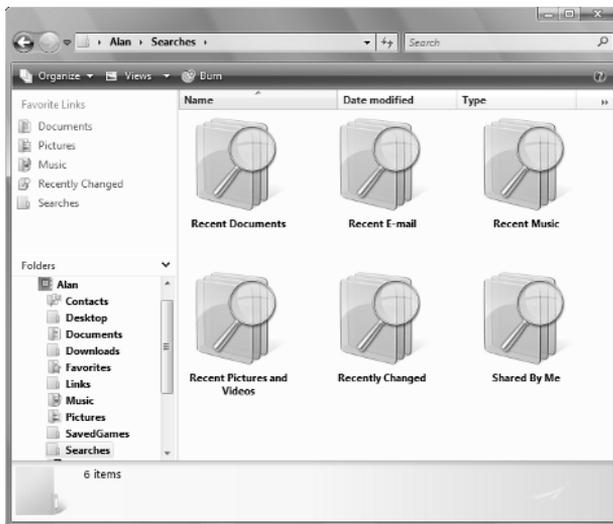
To take full advantage of the new search capabilities, you have to invest a little time in learning how searches really work. If you just try a few searches and give up, you'll never truly appreciate all that the new search index has to offer.

Saved searches (virtual folders)

You can save the results of any search you perform as a *virtual folder*. A virtual folder acts like a real folder. When you open it, you see the files it contains as icons. To see examples of virtual folders, click the Start button, click your user name on the Start menu, and open your Searches folder. Figure 1.11 shows icons for some sample saved searches (virtual folders).

FIGURE 1.11

Saved searches.



The virtual folders in your Searches folder are just examples. You're not stuck with just using those. You can create all the virtual folders you want. The beauty of it is that you don't have to go searching every time, because the virtual folder always reflects what's on your hard drive right now, not what was on it when you last performed the search.

Getting the most from searches, the search index, and virtual folders requires that you invest a little time in learning and understand how it all works. For best results, spend some time fine-tuning the search index to work the way you need it to. Chapters 30 and 31 tell how.

NEW FEATURE

Windows Vista was designed and built from the ground up with security in mind, making your system much less vulnerable to security threats.

Security

Security is a huge issue these days. The basic problem is that the PC and early operating systems were conceived and built before there was an Internet. The idea was that a PC would be a *personal* computer, and people didn't need a whole lot of security. After all, who would write a malicious program to wreak havoc on their own computer?

The Internet changed all that. The Internet allowed the bad guys who could write malicious software to harm other people's computers. Personal computers were sitting ducks for such attacks because nobody was thinking about such things when personal computers were initially conceived.

All of the solutions to the security problems so far are like afterthoughts, held in place with spit and paper clips. You have to purchase and install third-party programs, learn to use them, and keep them up to date. It's just a pain.

Ask any security professional what the *real* solution to the security problem is, and you'll get this answer: "Security has to be designed and built into a program from the ground up." And that's just what the people at Microsoft did with Vista. It's not just Windows XP with a pretty face. It's an entirely new operating system built from the ground up with security in mind at every step in the process.

Still, there's no such thing as a 100 percent secure computer or network. (Any security professional will tell you that, too.) The computer is a programmable machine. And as such, it can be programmed to do good things or bad things. It all depends on who wrote the program and for what purpose.

Designing security into Vista from the ground up makes it a lot tougher for the bad guys to write programs that do bad things to your PC. But where there's a will, there's usually a way, so you still need some security programs.

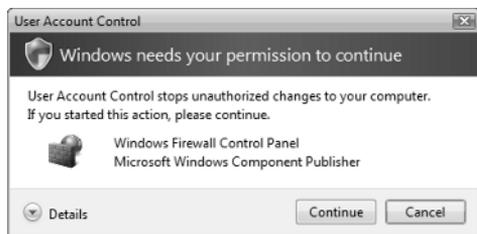
Well, actually, you just need one security program. You need an antivirus program because that's the only security that's not built into Vista. But you don't need a third-party firewall or anti-spyware software. The new Windows Firewall keeps out hackers and worms from the minute you start your computer. Windows Defender keeps away the spyware. For more information on Vista security, see Part II.

User Account Control

Surely one of the most *unpopular* security features of Windows Vista is called *User Account Control* (UAC). Here's how it works. Any time you run a program that makes some change to your important system files, you get a little message on the screen, like in Figure 1.12.

FIGURE 1.12

User Account Control.



Ninety-nine times out of a hundred, you'll just be irritated by this because you know what program you're running so of course you want to continue. So why show the message and make you click the button? Because if ever a malicious program does sneak past your defenses, you have the opportunity to stop and think "Whoa, where did that come from?" And you also have the opportunity to just say no and stop the malicious program in its tracks, before it can do any harm.

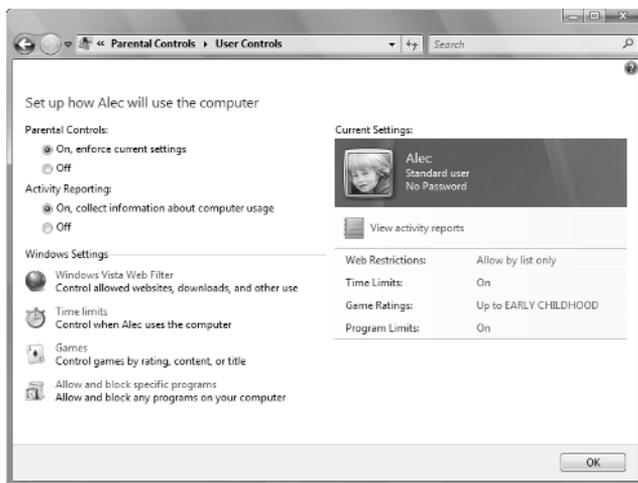
The fact that User Account Control is there for everyone's safety isn't going to make it any more popular. You can turn it off, if you like, and do things the old-fashioned way where every program runs with the permissions of your current user account without warning. See Chapter 3 for the full story.

Parental controls

Parental controls, shown in Figure 1.13, are another security feature for which many parents will be very thankful. As you can see in the figure, Parental Controls lets you control how and when your child can use the computer and access the Internet. You don't need to be a computer genius to set up parental controls. Chapter 4 provides all the details.

FIGURE 1.13

Parental Controls.



NEW FEATURE

If you use your computer to manage digital photos, you'll appreciate Photo Gallery's ability to help you fix and organize your pictures.

Windows Photo Gallery

Windows Photo Gallery offers a single place in which you can view, change, and manage all your photos and videos. You can tag pictures and videos with keywords. That makes them easy to bring together into a single view, regardless of their actual location on your disk. It has a Fix feature (see Figure 1.14) that makes it easy to adjust brightness and contrast, crop pictures, and fix the common "red eye" problem.

FIGURE 1.14

Photo Gallery Fix feature.

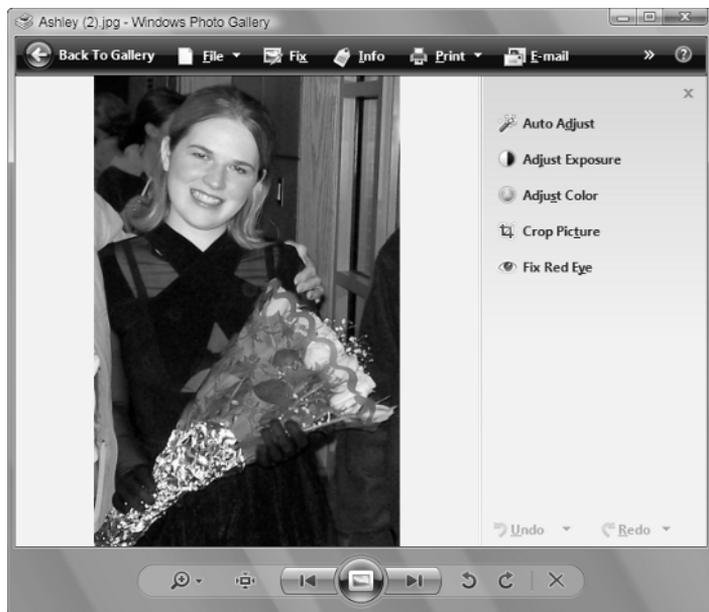


Photo Gallery makes it easy to create slide shows. You can even burn them to DVDs to watch on TV and to share with family and friends. If you're into photos, be sure to check out Chapter 22 for the full scoop.

NEW FEATURE

Windows Mail and Internet Explorer offer a plethora of new features. Better yet, they tie into the Search index, making it easy to find messages and favorite Web sites.

Windows Mail and Internet Explorer

In Vista, Windows Mail replaces Outlook Express as the built-in e-mail client. And it's a major improvement! It has a built-in junk mail filter that works like a charm (if you configure it wisely). It has a phishing filter to alert you to fake e-mail messages that attempt to steal your passwords by looking official. And it ties into your Contacts folder where you can store all your names and addresses, and even pictures of people!

Internet Explorer in Vista supports tabbed browsing, meaning that you can have multiple home pages and also switch among open pages more easily. Internet Explorer also makes it extremely easy to subscribe to RSS feeds. Be sure to check out Part IV for the full scoop on all the Internet-related enhancements in Vista.

NEW FEATURE

Gone are the days where you had to rely on third-party programs for CD and DVD burning. All of that is built right into most editions of Windows Vista.

Built-in CD and DVD Burning

Vista has built-in support for using CDs and DVDs for all their many uses. As always, you can use Windows Media Player (see Chapter 23) to create your own music CDs. Now you can also create your own DVD movies using Windows DVD Maker. You can even transfer movies straight from digital video tape to DVDs that you can watch on TV (see Chapter 32).

Just want to copy some files to a CD or DVD to send through the mail? No problem. Just drag-and-drop files like you would to a floppy disk (see Chapter 32). Want to back up your files to CDs or DVDs? That's easy, too. Use the new Backup and Restore Center (see Chapter 33).

NEW FEATURE Although Speech Recognition isn't entirely new, Vista extends the capability to more programs and even your desktop.

Speech Recognition

Speech Recognition in Windows Vista is a big improvement over Windows XP's speech recognition. You can use it to dictate Windows Mail messages and other documents. You can bark commands at Windows and other programs with your voice. It takes a good headset microphone and some training, but it sure can come in handy if you're suffering from aching "mouse shoulder," or just can't type worth beans. See "Using Speech Recognition" in Chapter 12 for the full story.

NEW FEATURE System Protection and the new Backup and Restore Center make it easier to protect your important files from damage and loss.

Better, Easier Backups

The new Backup and Restore Center in Windows Vista replaces the old NT Backup that has eluded most users for years. You can back up to CDs, DVDs, or an external hard disk. In the Premium and Ultimate editions of Vista, you can even automate backups. Furthermore, System Protection keeps *shadow copies* of many document files right on the hard disk, which means you can often recover a lost or damaged file without even using the external backup media. See Chapter 33 for the full story.

NEW FEATURE ReadyBoost uses modern flash memory to provide a quicker, smoother, overall computing experience.

Windows ReadyBoost

Readers who know computer hardware know that for years we've been doing everything with two types of memory. RAM (random access memory) holds the stuff you're using right now. The hard disk is more like a filing cabinet in that it holds everything you *can* use. RAM is much faster than disk storage, which is why you use it to hold stuff you're working with at the moment.

Historically, we've also used a *paging file* as a kind of intermediary between fast RAM and slow disk access. Although this conserves and extends RAM, it does so at a cost of little time delays each time the processor needs to get something out of the paging file. It's not a long delay, just a half a second to a couple of seconds. But over the course of a day, those little delays add up.

ReadyBoost gets rid of the delays by letting you use flash memory to store the paging file. Flash memory is a much better choice because on average it's about 10 times faster than the hard drive. Many new hard drives and motherboards will come with ReadyBoost flash memory built right in. As an alternative to using built-in hardware, you can use an external flash drive that plugs into a USB 2.0 port for ReadyBoost.

There are some restrictions on the jump drives you can use, because it only makes sense to use flash memory that's large enough and fast enough to produce results. But once you have the right hardware, Vista takes care of all the details. The result is a smoother, more fluid computing experience without the usual delays when the OS needs to get data from the paging file.

Wrap Up

When people ask me what's new in Vista, what I really want to say is *Everything*. It's really a whole new way of using a computer. Long gone are the days when people managed a few files and folders on external disks without an Internet connection. In today's connected world, we deal with massive amounts of digital information in many forms, and from many sources. Vista was designed and built from the ground up with that new reality in mind.

This chapter has been a sort of view from 30,000 feet of what's new in Vista. Here I've focused on the main things that most users will want to explore. But really there's much more than can be covered in a single chapter. Here's a quick recap of what's hot:

- Aero Glass brings a three-dimensional quality to the basic user interface to better reflect what's really happening on your desktop.
- Although it doesn't look like much, the little breadcrumb trail at the top of every folder greatly reduces the amount of time and effort you'll spend navigating through folders.
- Previous versions of files let you easily recover accidentally messed up and deleted files, even if you haven't backed them up.
- Searching in Windows Vista is nothing like the old Search Companion. And it's not about finding lost files. Instead, it provides a new layer of organization that transcends location and filename, bringing things together based on meaning and relevance.
- Security isn't tacked onto Windows Vista as an afterthought through countless extra security programs and patches. Most of the security is hidden deep inside where you'll never see it, keeping malicious software from doing its desired dirty work.
- Parental controls finally give parents the ability to control their children's computer and Internet use.
- Windows Photo Gallery is a great tool for managing, tagging, and fixing your photos.
- Windows Mail and Internet Explorer bring new ways to manage your mail, surf the Internet, and keep your computer, and yourself, more secure.
- Use Windows Vista's built-in support for CD and DVD burning to create music CDs, DVD movies, and backups of all your files.
- Speech Recognition is greatly improved and works virtually everywhere.
- The Backup and Restore Center makes it easy to back up and protect your important files.
- Windows ReadyBoost can use modern flash memory to dispense with the short delays caused by fetching data from the paging file, providing a smoother, more fluid computing experience.

