Part I **Sidebar Gadgets**

Introduction to Windows Sidebar

After working on the successor to Windows XP for more than five years, Microsoft finally unveiled the latest version of the Windows operating system — Windows Vista — in early 2007. Windows Vista touts many new and improved features, most notably its enhanced security and reliability. Apart from that, there are a lot of face lifts, particularly in the way in which users interact with the operating system and how they manage the huge influx of information.

Two important new features in Vista — Sidebar and SideShow — are the focus of this book. Windows Sidebar is a translucent panel anchored on your desktop that contains miniapplications known as Sidebar gadgets. These gadgets are designed for specialized purposes, such as displaying weather information, RSS news feeds, and more. The main use of gadgets is to provide a quick and easy way for users to obtain information, eliminating the need to launch full-scale applications. For example, you can use the Stock gadget to monitor the pricing trends of a few selected stocks without needing to launch the web browser and visit stock exchange web sites.

In this chapter, you explore the basics of Windows Sidebar and how to install and use the various gadgets included in Windows Vista. In addition, you learn how to download and install third-party gadgets onto your Sidebar. (You tackle SideShow in the second half of the book.)

What Is Windows Sidebar?

Windows Sidebar is a new user interface feature available in all versions of Windows Vista. Figure 1-1 shows the Sidebar anchored on the right of the screen, with five Sidebar gadgets docked within it. The five gadgets shown are Stocks, Clock, Slide Show, Feed Headlines, and Notes.

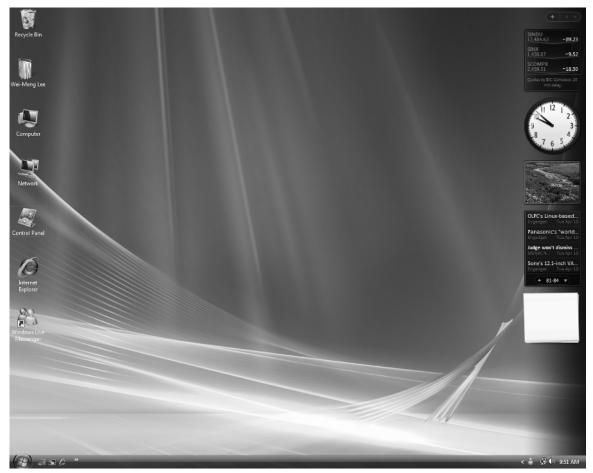


Figure 1-1

Windows Sidebar, Apple Dashboard, and Yahoo! Konfabulator

Critics of Microsoft are quick to complain that Microsoft copied the Sidebar concept from its competitors, most notably Apple and Yahoo!. Apple's Mac OS X v10.4 has a new feature known as Dashboard (shown in the following figure), which contains mini-applications called Dashboard Widgets.



Photo courtesy of Wikipedia.com (http://en.wikipedia.org/wiki/Image:Dashboard.jpg)

The idea behind Dashboard is similar to that of Sidebar: providing easy access to commonly required information. Ironically, Apple has been accused of copying the ideas behind Dashboard from Yahoo! Widget Engine (see the following figure), more famously known as Konfabulator.

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Photo courtesy of Wikipedia.com (http://en.wikipedia.org/wiki/Image:Konfabulator_screenshot.jpg)

Unlike Apple's Dashboard, the Yahoo! Widget Engine is a free application for both Mac OS X and Windows operating systems. (In comparison, Windows Sidebar is only available for Windows Vista users.)

Sidebar was actually present in the early builds of Windows Vista (beginning September 2002), way before Dashboard and Yahoo! Widget Engine were released.

The Windows Sidebar consists of two components:

- ☐ Sidebar pane The translucent panel anchored on your screen.
- ☐ Sidebar gadgets Mini-applications that can either be docked in the Sidebar or floating on the desktop.

Using Sidebar

The Sidebar pane is anchored to the right side of the Windows Vista desktop by default. It contains several built-in Sidebar gadgets (see Figure 1-2).



Figure 1-2

Launching Sidebar

The Windows Sidebar is itself a Windows application. When you boot Windows Vista, Sidebar is automatically launched by default. If for some reason the Sidebar does not load, you can manually load it by selecting Start ⇒ All Programs ⇒ Accessories ⇒ Windows Sidebar. Alternatively, you can type the word **Sidebar** in the Start Search box to launch the Sidebar application.

The Sidebar application is located in the C:\Program Files\Windows Sidebar folder, which has the following subfolders (see Figure 1-3):

- en-US Stores the localized versions of the Sidebar application (the default culture is English in US).
- Gadgets Contains the various Sidebar gadgets that come pre-installed on your local system.
- ☐ Shared Gadgets Contains gadgets that are shared among all the users of the computer.



Figure 1-3

Customizing Sidebar

Once Sidebar is running, a Windows Sidebar icon displays in the system tray (see Figure 1-4).



Figure 1-4

To customize the appearance and properties of the Sidebar, right-click either the Windows Sidebar or its icon, and then select Properties. The Windows Sidebar Properties dialog box (see Figure 1-5) opens.

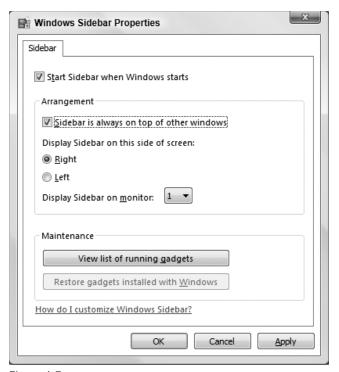


Figure 1-5

You can configure the Sidebar with the following options:

- ☐ Start Sidebar when Windows starts Auto-launches Sidebar when Windows starts.
- ☐ Sidebar is always on top of other windows Sidebar will always appear on top of other windows. This option is useful if you have a large display (or have more than one display attached to your system) and can afford the additional space taken up by Sidebar. For smaller monitors, it is always better to uncheck this option.
- Display Sidebar on this side of the screen Right or Left. In addition, if you have more than one monitor attached to your system, you can also specify the monitor to display the Sidebar.
- ☐ View list of running gadgets Click to see a list of currently running gadgets; you have the option to remove them from the Sidebar.

Hiding Sidebar

Quite often, you may need to free up some screen real estate to gain additional space for running applications such as Visual Studio 2005. You can hide the Sidebar by simply right-clicking it and selecting Close Sidebar. This step only hides the Sidebar; the application will still be running in the background. To view the Sidebar again, right-click the Sidebar icon in the system tray and choose Open.

If desktop icons are covered by the Sidebar, there is no way you can use the mouse to reach them. For example, Figure 1-6 shows an image file named Golden Gate Bridge covered by the Sidebar; you can't access it while the Sidebar is visible. To get the Sidebar out of the way, you can either use the Close Sidebar option described earlier, or right-click the taskbar and select Show the Desktop. Either way, the Sidebar disappears and you can access the image file.



Figure 1-6

If you don't need Sidebar anymore, right-click the Sidebar icon in system tray and select Exit.

Sidebar Gadgets

A Sidebar is virtually useless if there are no Sidebar gadgets in it. Sidebar gadgets are mini applications that can be docked inside the Sidebar or floating on your desktop.

Understanding the Gadgets World

Microsoft seems to be using the term "gadgets" pretty casually, and at this moment there are three different types of gadgets offered by Microsoft:

- Live gadgets (also known as Web gadgets)
- ☐ SideShow gadgets
- ☐ Sidebar gadgets

Live gadgets are mini web applications that appear in your Live.com pages. Figure 1-7 shows a Live.com page containing three Live gadgets — The Hive Multi-Gadget, MSN Video, and Live Clock. Live gadgets aren't covered in this book, but if you are interested in developing them, check out the Web Gadget SDK at http://microsoftgadgets.com/livesdk/index.htm.

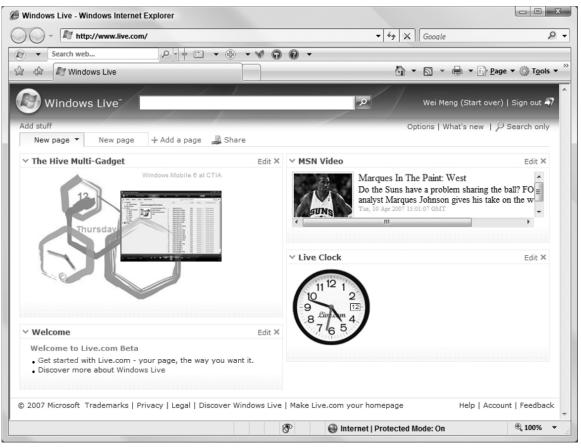


Figure 1-7

SideShow gadgets are applications that work with auxiliary devices (known appropriately as SideShow devices). SideShow gadgets are covered in detail in Chapters 6–10.

And of course, Sidebar gadgets are the focus of this chapter.

Built-in Sidebar Gadgets

Windows Vista comes with 11 cool Sidebar gadgets that you can use:

Calendar — A simple calendar application that displays dates in various views. You cannot change the current date, but it is useful if you need to quickly refer to a particular date.				
Clock — Displays time in the time zone you select. You can change the analog clock face.				
Contacts — Displays contacts' information stored in your Windows Contacts application. This gadget offers a quick way to find contacts without needing to launch the Windows Contacts application.				
CPU Meter — Displays the CPU and memory usage of your computer.				
Currency — A currency converter that enables you to convert up to four currencies at once. The application goes online to fetch the latest exchange rates, so the results are quite accurate.				
Feed Headlines — An RSS feeds aggregator that shows your Internet Explorer feed subscriptions.				
Notes — Virtual Post-It notes. You can change the color as well as add additional pages.				
Picture Puzzle — A tile game that requires you to piece together the various parts of a photo.				
Slide Show — Displays photos stored on your local computer as a slide show. You can set the delay between each photo, as well as specify the transition effect.				
Stocks — Displays stock information in real time. Choose the stocks you are interested in and monitor their price movements.				
Weather — Displays current weather information as well as the forecast for the next three d	lays			
Windows Sidebar Shortcuts				
Here are some time-saving keyboard shortcuts to use with Windows Sidebar:				
☐ Windows + spacebar — Toggles showing and hiding Windows Sidebar. Strangely, this shortcut may not work when at least one gadget is undocked from the Sidebar pane.				
☐ Windows + G — Cycle through the gadgets in Windows Sidebar.				

Detaching Sidebar Gadgets from Sidebar

To detach (undock) a Sidebar gadget from the Sidebar so that it floats on your desktop, right-click the gadget and select Detach from Sidebar. Alternatively, you can drag gadgets from the Sidebar and drop them onto the desktop.

In Microsoft's parlance, when a gadget is contained in the Sidebar pane it is known as Docked. When it is detached from the Sidebar pane, it is known as Undocked.

When gadgets are detached from the Sidebar, they often expand, taking more screen space. This allows gadgets to expose more functionality than was possible when they were docked in the Sidebar. For example, Figure 1-8 shows the Weather gadget docked inside the Sidebar (left) and outside the Sidebar floating on the desktop (right).



Figure 1-8

To re-attach (dock) a gadget to the Sidebar, right-click the gadget and select Attach to Sidebar, or just drag and drop it onto the Sidebar. You can also rearrange gadgets within the Sidebar pane by simply dragging and dropping them onto the desired location.

Sidebar gadgets detached from the Sidebar remain visible even if the Sidebar is closed (hidden).

Adding Gadgets to Sidebar

When you first boot up Windows Vista, the Sidebar contains four gadgets — Stocks, Clock, Slide Show, and Feed Headlines. As mentioned in the previous section, 11 gadgets ship with Windows Vista. So how do you add them to the Sidebar? That's easy. Simply right-click the Sidebar and select Add Gadgets. The Gadgets Gallery appears (see Figure 1-9).

The Gadgets Gallery shows all the gadgets installed on the local computer (those that come with Vista as well as those you install yourself). To add a gadget to the Sidebar, double-click it. To uninstall a gadget from the local computer, right-click the gadget and select Uninstall.



Figure 1-9

Obtaining Additional Sidebar Gadgets

In addition to the built-in Sidebar gadgets provided by Microsoft, you can add gadgets developed by others (in the next chapter you learn to develop gadgets yourself). In the Gadgets Gallery, click the Get More Gadgets Online link (see Figure 1-10) to view the gadgets directory on Microsoft's web site (http://vista.gallery.microsoft.com/vista/SideBar.aspx?mkt=en-us).

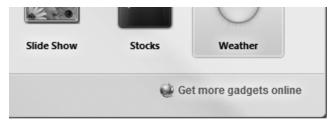


Figure 1-10

Browse through the gadgets directory (see Figure 1-11). When you find one you want, you can install it directly from the link on the page.



Figure 1-11

Just choose a gadget and then follow these steps:

- **1.** Click the gadget's Download link.
- **2.** A dialog box warns you about the danger of installing third-party applications. Click OK to proceed with the installation.

3. You can either click Open to directly install the application, or click Save to save the gadget to your local computer (see Figure 1-12.)

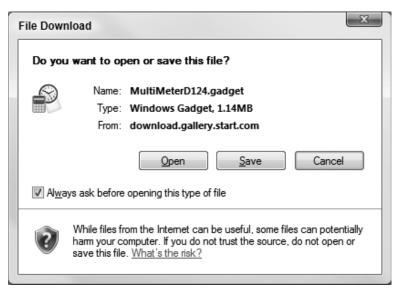


Figure 1-12

- **4.** When the gadget tries to install on your local computer, you're prompted with an Internet Explorer Security warning. If you trust the source of the gadget, click Allow to proceed with the installation.
- **5.** Windows Sidebar prompts you with another security warning. Click Install to proceed with the installation if you trust this gadget.

All gadget files saved on your local computer have the .gadget extension.

When the installation is completed, you should see your newly installed gadget in the Gadgets Gallery (see Figure 1-13).

Where Are All the Sidebar Gadgets Stored?

All the Sidebar gadgets shipped by Microsoft are stored in the C:\Program Files\ Windows Sidebar\Gadgets folder. Any additional Sidebar gadgets you've downloaded and installed are saved into C:\Users\< user_name>\AppData\Local\Microsoft\ Windows Sidebar\Gadgets. Note that you need to configure your Windows Explorer to view hidden files and folders to view this folder.



Figure 1-13

Running Multiple Instances of a Gadget

Sometimes it makes sense to run multiple copies of the same gadget on the Sidebar. For example, you may want to use one Clock gadget to display the current time in London and another to show the current time in Chicago. All you have to do to add another instance is follow the same procedure to add a gadget to your Sidebar.

Sidebar Gadgets Are Not Persistent

When you close a gadget, you lose all information that you created in it. For example, you have the Notes gadget running in the Sidebar and have typed in some text into it. When you close the Notes gadget and add it back to the Sidebar again, all the text that you have typed in previously is gone and will never come back again. When you close a Clock gadget that is currently displaying London time, it is reset to the computer's default time zone when you add a new copy of the Clock gadget to the Sidebar pane again.

Part I: Sidebar Gadgets

Why is this so? Well, every time you add a gadget to the Sidebar, you are actually creating a new instance of it. And each instance has its own set of application settings that is independent of other instances. And due to this behavior, each time you add a gadget to the Sidebar it will initialize itself to some default values.

Of course, developers can code their gadgets to manually persist the settings so that the information can be shared with other instances of the same gadget. That's discussed in more detail in Chapter 4.

Summary

This chapter provided a quick overview of the capabilities of Windows Sidebar. You have seen how to launch the Sidebar and also how to add and install new gadgets onto the Sidebar. In the next chapter, you embark on the journey of creating your first Sidebar gadget.