Microsoft

Optimizing Windows® 7

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Pocket Consultant

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Contents

Introduction *ix*

Chapter 1 Customizing the Windows 7 Interface 1

Boosting Your Desktop IQ 1
- Optimizing Interface Performance 2
- Mastering Desktop Essentials 4
- Stretching the Desktop 6

Making the Start Menu Work for You 9
- Customizing the Programs List 10
- Customizing the Important Folders and Tools List 11

Making the Taskbar Dance 12
- Putting the Taskbar Where You Want It 12
- Customizing Taskbar Appearance 13
- Pinning Programs to the Taskbar 14
- Using Flip Views and Jump Lists 15

Chapter 2 Personalizing the Appearance of Windows 7 19

Customizing Basic Interfaces 19
- Personalizing Menus 20
- Personalizing Control Panel 20
- Fine-Tuning Control Prompts 21
- Creating an Alternate Control Panel View 24
- Creating a Dedicated Administrator Command Prompt 25

Optimizing Desktop Themes, Screen Savers, Backgrounds, and More 25
- Selecting and Tuning Themes 26
- Fine-Tuning Windows Aero Colors 27

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Customizing and Creating Your Own Desktop Backgrounds 28
Choosing and Configuring Your Screen Saver 31
Configuring and Creating Your System Sounds 34
Customizing Your Mouse Pointers 36
Saving Your Custom Themes and Creating Theme Packs 37
Customizing Your Displays 38
Customizing and Safeguarding Your User Account 40
Changing Your Account Name 41
Changing and Creating Account Pictures 41
Changing Your Account Type 42
Creating, Storing, and Restoring Your Account Password 43

Chapter 3 Customizing Boot, Startup, and Power Options 45

Customizing Your Computer's Firmware Interface 45
Getting to Know Your Computer's Firmware Interface 46
Accessing and Setting Your Computer's Firmware Interface 47
Tracking and Configuring Power On and Resume 50
Customizing Startup and Boot Configuration. 52
Fine-Tuning Startup and Recovery Settings 53
Changing Your Computer's Boot Configuration 54
Performing an Advanced or Safe Mode Boot 58
Customizing Boot Configuration with the BCD Editor 60
Resolving Restart or Shutdown Issues 63
Recovering from a Failed Resume 63
Forcing Your Computer to Shut Down 64
Repairing a Computer to Enable Startup 64

Chapter 4 Organizing, Searching, and Indexing 67

Exploring Your Computer in New Ways. 67
Address Bar Tips and Techniques 68
Keyboard Tips and Techniques for Windows Explorer 70

Customizing Windows Explorer 72
Fine-Tuning Folder Views 72
Customizing Folder Options 74
Searching and Indexing Your Computer 78
Windows Search Essentials 78
Understanding Localized Searches 79
Fine-Tuning Windows Search 80
Customizing Search Options 80
Performing Advanced Searches with Filters 82
Searching by Kind or Type of File 85
Searching Using Date-Related Filters 86
Searching Using Size-Related Filters 89
Saving Your Searches 91
Indexing Your Computer 91
Customizing Indexed Locations 92
Including or Excluding Files by Type 92
Resolving Indexing Problems 94

Chapter 5 Optimizing Your Computer's Software 95

Diving Deep into Software Installation 95
Understanding and Tweaking User Account Control 95
Understanding Autorun and Tweaking AutoPlay 99
How Windows Installer and Program Compatibility Work 101
How 64-Bit Software Works 102
Installing and Running Your Software 104
Making Software Work Like You Want It To 106
Making MS-DOS and 16-Bit Software Work 106
Controlling Software Availability 107
Using Windows XP Mode 109
Resolving Compatibility Issues 109
Managing Installed Software 112
Choosing Default Programs 112
Reconfiguring, Repairing, and Uninstalling Software 115
Viewing and Managing Running Programs 116

Chapter 6 Tracking System Performance and Health 119

Tracking Relative Performance 119

Understanding Your Computer's Relative Performance Levels 120

Improving Your Computer's Relative Performance Levels 123

Checking Current Performance Levels 126

Tracking Applications and Processes 126

Tracking Performance and Resource Usage 128

Event Logging and Viewing 131

Digging into the Event Logs 132

Resolving Performance Issues with the Logs 133

Chapter 7 Analyzing and Logging Performance 135

Resolving Failures and Reliability Issues. 135

Checking for Problems That Are Affecting Performance 136

Analyzing Reliability Issues That Are Affecting Performance 138

Diagnosing and Resolving Problems with Troubleshooters 141

Examining Resource Usage in Detail 144

Recording and Analyzing Performance Data 146

Logging Performance Data 146

Choosing Counters to Monitor 149

Identifying Performance Bottlenecks 151

Chapter 8 Optimizing Performance Tips and Techniques 155

Optimizing Power Management Settings for Performance. . . . 155

Selecting and Using Power Plans 155

Creating and Optimizing Power Plans 161

Resolving Power Problems That Are Affecting Performance 162

Maintaining Performance with Updates 164

Fine-Tuning Automatic Updates 165

Resolving Update Problems 166

Optimizing Performance: Final Tune-up Suggestions **167**
Disabling Unnecessary Services and Features **167**
Fine-Tuning Virtual Memory **168**
Fine-Tuning Data Execution Prevention **170**
Enhancing Performance with ReadyBoost **171**
Cleaning Up Your Disk Drives **173**
Checking Your Disks for Errors **174**
Optimizing Disk Performance **176**

Appendix *179*

Index *185*

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Introduction

Welcome to *Optimizing Windows 7 Pocket Consultant*. Over the years, I've written about many different Windows technologies and products, but one of the products I like writing about most is Windows itself. When you start working with Windows 7, you'll see at once that this operating system is visually different from earlier releases of Windows. What won't be readily apparent, however, is just how different—and that's because many of the most significant changes to the operating system are under the surface. These changes affect the underlying architecture, not just the interfaces—and they were some of the hardest for me to research and write about.

In this book, I teach you how features work, why they work the way they do, and how to customize them to meet your needs. I also offer specific examples of how certain features can meet your needs and how you can use other features to troubleshoot and resolve issues you might have. In addition, this book provides tips, best practices, and examples of how to fine-tune all major aspects of Windows 7. This book won't just teach you how to configure Windows 7; it will teach you how to squeeze every last bit of power out of it and make the most of the features and options it includes.

Who Is This Book For?

Optimizing Windows 7 Pocket Consultant covers all editions of Windows 7. The book is designed for the following readers:

- Accomplished users and information managers who want to know more about the operating system
- Administrators, help desk staff, and others who support the operating system
- Developers who develop applications for the operating system and want to know how to optimize core components

To pack in as much information as possible, I had to assume that you have basic networking skills and a basic understanding of Windows 7. I also assume that you are fairly familiar with Windows commands and procedures as well as the Windows user interface.

How Is This Book Organized?

Speed and ease of reference are essential parts of this hands-on guide. This book has an expanded table of contents and an extensive index for finding answers to problems quickly. Many other quick-reference features are included as well, including quick step-by-step procedures, lists, tables, and extensive cross-references.

Part I, "Optimization Essentials," focuses on fine-tuning the operating system's appearance and performance. No "Hello" and "Welcome" stuff here. You'll roll

up your sleeves and dive right in to the good stuff while also learning how to personalize the operating system.

After you have customized the interface and appearance, *Optimizing Windows 7 Pocket Consultant* takes you through the process of optimizing core components. In Chapter 3, "Customizing Boot, Startup, and Power Options," you'll learn how to fine-tune boot, startup, power on, and resume. In Chapter 4, "Organizing, Searching, and Indexing," you'll learn how to optimally organize the documents, pictures, music, and other files on your computer so that you can not only get to them quickly but also view and work with them quickly. In Chapter 5, "Optimizing Your Computer's Software," you'll learn about managing and maintaining your computer's software with an emphasis on performance and problem resolution.

After you've fine-tuned the interface, appearance, and core components, you'll want to track system health and performance to ensure that your computer runs optimally—that's exactly what Part III, "Fine-Tuning Performance," covers. Here, you'll dig in and dive as deep as you want to into tracking, analyzing, and issue resolution.

Conventions Used In This Book

This book uses visual cues to help keep the text clear and easy to follow. You'll find code listings in `monospace` type, and text that you must type when performing a task appears in **boldface** type. New technical terms appear in *italics* and are followed by a definition.

Other Resources

Although some books are offered as all-in-one guides, there's simply no way one book can do it all. This book is intended to be used as a concise and easy-to-use resource. It covers everything you need to perform core optimization tasks for Windows 7, but it is by no means exhaustive.

As you encounter new topics, take the time to practice what you've learned and read about. Seek additional information as necessary to get the practical experience and knowledge that you need.

I recommend that you regularly visit the Microsoft website for Windows 7 (*http://www.microsoft.com/windows/*) and *http://support.microsoft.com* to stay current with the latest changes. You may also want to refer to *Windows 7 Administrator's Pocket Consultant* for more detailed information on management, maintenance, and problem resolution.

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CHAPTER 1

Customizing the Windows 7 Interface

Windows 7 is more customizable than any earlier release of the Windows operating system. Powerful new features and options combined with old favorites allow you to work in new ways. You can perform tasks more efficiently, and you can optimize and customize the operating system in many new and exciting ways.

Teaching you how to optimize Windows 7 and make it work the way you want it to is what this book is all about. If you were moving into a house, apartment, or dorm room, you would want to make the space your own. We do the same with just about everything in our lives, yet surprisingly few people take the time to make their virtual space their own, which can make using a computer a frustrating experience.

One of the ways to make Windows 7 your own is to customize the interface. In any operating system, the interface is everything that connects you to your computer and its basic elements, including the desktop, the menu system, and the taskbar. The way these basic elements look depends on appearance settings. The way they behave depends on customization settings saved in the user profile associated with a particular user account. Because your user account and its associated profile are separate from the profiles associated with other user accounts on a computer, you can customize the interface without affecting other users, and your preferred settings will be remembered and restored each time you log on.

Boosting Your Desktop IQ

The desktop is what you see after you start your computer and log on. It's your virtual workspace, and you must master it to begin using your computer faster and smarter.

Optimizing Interface Performance

Windows 7 (with the exception of Starter and Home Basic editions) supports Aero Glass features that provide desktop special effects such as blending and transparency. The Windows 7 desktop with Aero Glass enabled is pretty, but like any cosmetic, its value depends on many factors. The same can be said for the inessential animations and display effects that are enabled by default on most computers running Windows Home Premium or higher.

On older, less powerful computers, you will want to use less of the pretty stuff; using fewer system resources makes Windows more responsive. The same is likely to be true for that new netbook or tablet PC you just bought.

You can optimize the desktop for the way you want to work by following these steps:

1. Click Start, type **SystemPropertiesAdvanced** in the Search box, and then press Enter to open the System Properties dialog box with the Advanced tab selected.

   TIP **Although there are many shortcuts you can use to access the various tabs and options of the System Properties dialog box, you need not know or remember them all. Instead, pick one technique you like, put it to memory, and use it. The technique I like most is the one mentioned in this step. If the Advanced tab isn't the one I want to work with after I've opened the dialog box, I simply click the tab I want to use, rather than trying to remember that SystemPropertiesComputerName opens the Computer Name tab, SystemPropertiesHardware opens the Hardware tab, SystemPropertiesProtection opens the System Protection tab, and SystemPropertiesRemote opens the Remote tab.**

   REAL WORLD **If command memorization isn't your thing but you'd still like a quick and easy way to access System Properties, try this: Click Start, and type SystemPropertiesAdvanced in the Search box on the Start menu. Right-click SystemPropertiesAdvanced in the results, and then click Pin To Taskbar. Now the System Properties | Advanced Tab shortcut is available on the taskbar. Whenever you want to access it, simply click the related icon on the taskbar.**

2. In the Performance section, click Settings to open the Performance Options dialog box, shown in Figure 1-1. You can now:
   - Select Adjust For Best Performance to get rid of all the pretty stuff, or select Adjust For Best Appearance to enable all the pretty stuff.
   - Select or clear individual visual effects.
3. Save your changes by clicking OK twice to close both dialog boxes.

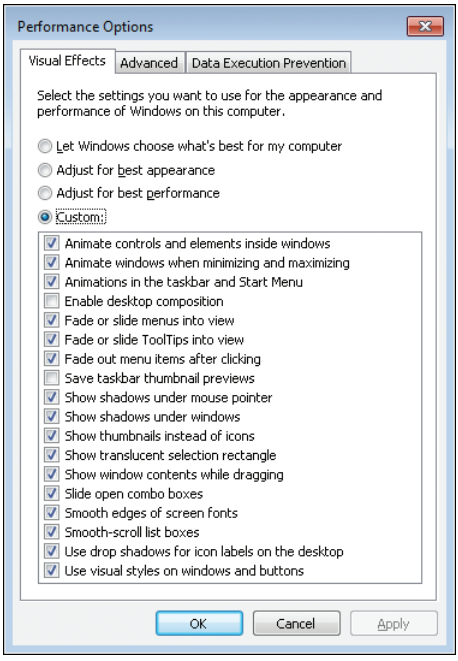

FIGURE 1-1 Configuring visual effects to optimize the desktop for the way you want to use it

The visual effects options that have the biggest effect on performance, in approximate order of impact, include:

- **Enable Transparent Glass** Controls Window transparency. This might be "flashy," but it is also resource intensive. When off, Windows and dialog box frames are solid.
- **Animate Windows When Minimizing And Maximizing** Determines whether squeezing or stretching animation is used when minimizing or maximizing windows. When off, Windows pop into position.
- **Fade Or Slide Menus Into View** Controls whether menus fade or slide into view. When off, menus snap open without delay.
- **Fade Or Slide ToolTips Into View** Controls whether tooltips fade or slide into view. When off, tooltips snap open without delay.
- **Animate Controls And Elements Inside Windows** Controls the slow-fade effect on buttons and tabs in dialog boxes. When off, buttons glow and tabs open without animation.
- **Animations In The Taskbar And Start Menu** Controls animations associated with jump lists, thumbnail previews, and sliding taskbar buttons. When off, no animations are used.
- **Slide Open Combo Boxes** Controls the animations associated with drop-down list boxes. When off, drop-down lists snap open.

REAL WORLD **The Enable Desktop Composition option ensures that Windows creates a snapshot of each open window in memory before rendering and drawing on the desktop. When you turn this option off, Windows writes directly to the screen, which can improve performance. However, it precludes the use of glass transparency, certain animations, thumbnail previews, and other related features.**

Mastering Desktop Essentials

Like a real workspace, the desktop can get cluttered. Programs that you run and folders that you open appear on the desktop in separate windows, and all these open windows can quickly make it difficult to get to the desktop itself. To quickly declutter, you can rearrange open program and folder windows by right-clicking an empty area of the taskbar and then selecting one of the following viewing options:

- **Cascade Windows** Arranges the open windows so that they overlap, with the title bar remaining visible.
- **Show Windows Stacked** Resizes the open windows and arranges them on top of each other, in one or more columns.
- **Show Windows Side by Side** Resizes the open windows and stacks them side by side.

To get to the desktop without decluttering, use the small, blank button on the far right of the taskbar. This button is called the Show Desktop button. You can:

- Temporarily make all open windows transparent by moving the pointer over the Show Desktop button. Restore the windows to their previous state by moving the pointer away.

  NOTE **The feature that makes this work is called Aero Peek. Enable Aero Peek and Enable Desktop Composition must be selected on the Visual Effects tab of the Performance Options dialog box.**

- Temporarily hide all open windows by clicking the Show Desktop button. Click the button again to unhide the windows and restore them to their previous state.

  TIP **You don't need Aero Peek or Desktop Composition to show or hide windows in this way. Another way to hide or show open windows is to press the Windows logo key+D.**

You can store files, folders, and shortcuts on the desktop for quick and easy access. Any file or folder that you drag from a Windows Explorer window to the desktop stays on the desktop. Rather than placing files or folders on the desktop, you can add a shortcut to a file or folder to the desktop by following these steps:

1. Click Start, click Computer, and then use Windows Explorer to locate the file or folder that you want to add to the desktop.
2. Right-click the file or folder. On the shortcut menu, point to Send To, and then select Desktop (Create Shortcut).

You can also add system icons to the desktop. By default, the only system icon on the desktop is the Recycle Bin. You can add or remove system icons by completing the following steps:

1. Right-click an empty area of the desktop, and then click Personalize.
2. In the left pane of the Personalization window, click Change Desktop Icons. This opens the Desktop Icon Settings dialog box, as shown in Figure 1-2.
3. Add or remove icons by selecting or clearing their related check boxes and then clicking OK to save your changes.

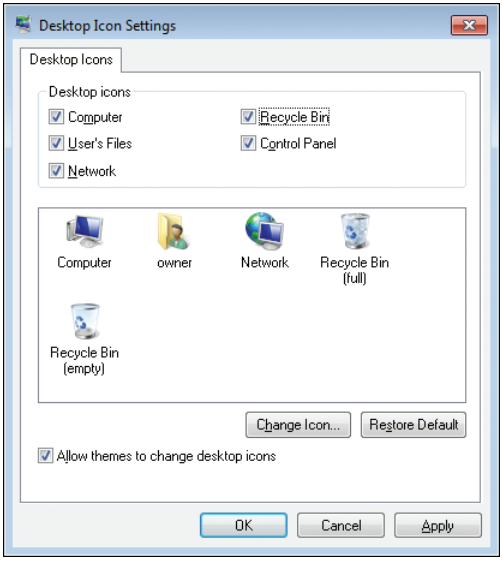

FIGURE 1-2 Configuring the desktop icons

Some of the desktop icons can be renamed by right-clicking the icon, clicking Rename, typing the desired name, and then pressing Enter. For example, you could rename Recycle Bin as Trash Barrel by right-clicking Recycle Bin, clicking Rename, typing **Trash Barrel**, and then pressing Enter.

If you no longer want an icon or shortcut on the desktop, right-click it, and then click Delete. When prompted, confirm the action by clicking Yes. Each icon has special options and uses:

- **Accessing computers and devices on your network** Double-clicking the Network icon opens a window where you can access the computers and devices on your network.
- **Accessing Control Panel** Double-clicking the Control Panel icon opens the Control Panel, which provides access to system configuration and management tools.

- **Accessing hard disks and devices** Double-clicking the Computer icon opens a window from which you can access hard disk drives and devices with removable storage.
- **Accessing the System page in Control Panel** Right-clicking the Computer icon and selecting Properties displays the System page in Control Panel.
- **Accessing Windows Explorer** Double-clicking the folder icon opens your user profile folder in Windows Explorer.
- **Connecting to network drives** Right-clicking the Computer icon (or the Network icon) and selecting Map Network Drive allows you to connect to shared network folders.
- **Managing your computer** Right-clicking the Computer icon and selecting Manage opens the Computer Management console.
- **Removing deleted items** Right-clicking the Recycle Bin icon and selecting Empty Recycle Bin permanently removes all items in the Recycle Bin.
- **Restoring deleted items** Double-clicking the Recycle Bin icon opens the Recycle Bin, which you can use to view or restore deleted items.

REAL WORLD **Now that you know how to add items to the desktop, try this:**

1. **Create a custom Show Desktop button that you can place anywhere on the desktop, open Notepad.exe, type the commands below, and then save the file as Show.scf.**

   ```
   [Shell]
   Command=2
   IconFile=Explorer.exe,3
   [Taskbar]
   Command=ToggleDesktop
   ```

2. **Double-click the related icon to hide or unhide windows.**

Stretching the Desktop

Increasingly, desktop PCs and laptops support multiple display devices, allowing you to add a monitor to increase your desktop space. Not only is this a relatively inexpensive way to make your computer more useful, it can also boost your productivity.

Here's an example: You connect two monitors to your computer, or add a monitor as an additional output for your laptop. By placing the screens side by side and enabling multiple displays, you effectively stretch your desktop space and make it possible to view programs and files open on both screens at the same time. Thus, instead of having to toggle between multiple windows, you can have multiple windows open all the time—some on your primary screen and some on your secondary screen.

Typically, if a computer supports multiple displays, it has multiple display adapter connectors. For example, if a desktop PC has three display adapter connectors

(two digital and one analog), it likely supports at least two monitors; if a laptop has additional display adapter connectors (digital or analog), it likely supports at least two monitors.

You can confirm the number of supported displays by checking the technical specifications for your display adapter on the manufacturer's website. To determine the type of display adapter on your computer, right-click an empty area of the desktop, and then select Screen Resolution. On the Screen Resolution page, click the Advanced Settings link. The adapter type listed for your display adapter shows the manufacturer name and model information, such as NVIDIA GeForce GT 220.

Getting a computer that supports multiple monitors to stretch the desktop across two monitors is best handled as follows:

1. With the computer shut down (and not in the sleep or hibernate state), connect the monitors to the computer, and then turn on the monitors.
2. Next, start your computer and log on.

   TROUBLESHOOTING **The logon screen should appear on one of the monitors (although not necessarily on the one directly in front of you). If the logon screen doesn't appear, turn off both monitors in turn, and then turn the monitors back on. If a monitor has multiple modes, such as analog and digital, wait for the monitor to switch to the appropriate mode or manually configure the mode by using the monitor's configuration settings. You may need to wiggle the mouse or press keys on the keyboard to get the monitor to sense the appropriate mode.**

3. Right-click an open area on the desktop, and then select Screen Resolution to open the Screen Resolution page in Control Panel, as shown in Figure 1-3.

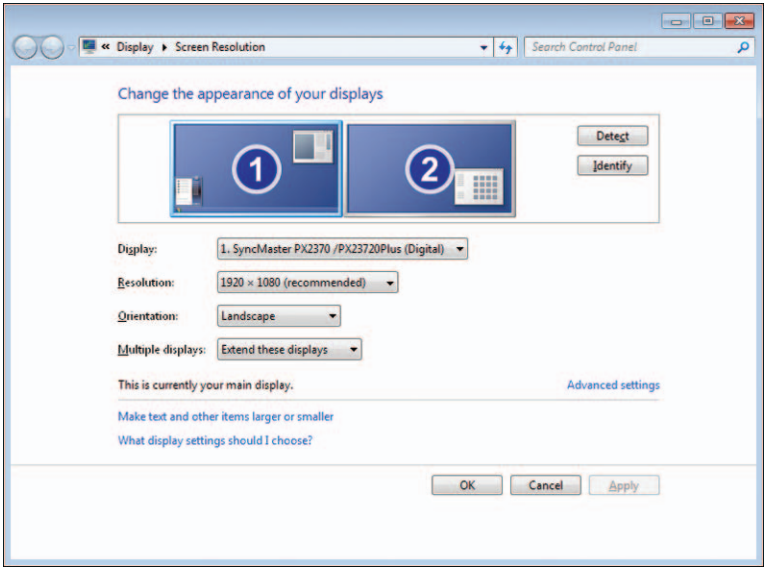

FIGURE 1-3 Identifying and orienting the displays

4. You have the choice of extending your desktop across the available display devices or duplicating the desktop on each display (as you might want to do with a laptop). Extend the desktop by clicking Extend These Displays in the Multiple Displays list and then clicking Apply. Duplicate the desktop by selecting Duplicate These Displays in the Multiple Displays list.
5. Click Detect to have Windows display the identity number of each monitor. With two monitors, the displays are numbered 1 and 2. By default, Display 1 always includes the Start menu, taskbar, and notification tray, but you can change this as discussed in the "Making the Taskbar Dance" section, later in this chapter.
6. Confirm the display order. Windows doesn't know how you've placed the monitors on your desktop. Instead, it assumes that the primary display device is the first one connected to the display adapter and the secondary display device is the second one connected. It also assumes that the second display is to the right of the first display, which allows you to move the mouse pointer to the right to go from the desktop on the first display to the desktop stretched to the second display.
7. You can tell Windows how your monitors are oriented in several ways. If Display 2 is on the left side of Display 1, click the representation of the Display 2 desktop on the Screen Resolution page, drag it to the left past the Display 1 desktop, release the mouse button, and then click Apply. The orientation should now show Display 2 on the left and Display 1 on the right; you can confirm proper configuration by clicking the Identify button. To reverse this procedure, perform the same steps, but drag to the right instead of to the left.
8. You can change the monitor that is identified as Display 1 by clicking the representation of its desktop on the Screen Resolution page, clicking Make This My Main Display, and then clicking Apply. If the monitor you've selected is already Display 1, you won't have this option.

REAL WORLD **If you identify and orient the displays incorrectly, moving from the desktop on one monitor to the stretched desktop on the other monitor won't be logical. For example, if Display 2 is physically located to the right of Display 1, but you've incorrectly configured the displays, you may not be able to access the stretched desktop on Display 2 by moving the pointer to the right. Instead, you may need to move the pointer to the left, past the edge of Display 2's desktop, and vice versa.**

After you've connected an additional monitor and oriented it properly, working with multiple monitors is fairly straightforward. When you stretch the desktop across two displays, the resolution setting of both displays determines the size of the desktop. If Display 1's resolution is 1920 x 1080 and Display 2's resolution is 1920 x 1080, the effective resolution is 3840 x 1080.

When you maximize windows, they fill their current display from edge to edge. You can click on windows and drag them from the desktop on one display to the stretched desktop on another display. After you click and drag a window, size it as appropriate for the way you want to use it. For many programs, Windows remembers where you've positioned a window when you close it; the next time you open the window, it appears positioned on the appropriate display, as you last worked with it. Generally, there's no special magic to make this work. However, some programs won't remember your preferred monitor, either by design or because the program isn't appropriate for multiple displays.

Any wallpaper you've selected as the background for your desktop will appear on all your displays. Whether you choose a picture position of Fill, Stretch, Fit, or Center, you see a duplicate of the background on each display. When you shuffle background images, the same shuffled image appears on each display as well.

If you want different pictures to appear on each display, you must create pictures at the appropriate resolution, store them in an appropriate folder (such as a subfolder of C:\Windows\Web\Wallpaper), select them as your desktop background, and use the Tile option of the Picture Position list. For example, if Display 1's resolution is 1920 x 1080 and Display 2's resolution is 1920 x 1080, using an art program such as Photoshop, you could combine two 1920 x 1080 images to create one 3840 x 1080 image. You would then store this image in an appropriate folder and select it as your tiled wallpaper.

You also may be wondering how your screen savers will work with multiple displays. The standard screen savers that come with Windows 7 also stretch across your displays automatically. There's no need to do anything special to make this happen.

Making the Start Menu Work for You

The Start button provides access to your computer's menu system. Clicking the Start button displays the Start menu. You also can display the Start menu by pressing the Windows logo key on your keyboard or by pressing Control+Esc.

As you probably know, and as Figure 1-4 shows, the Start menu allows you to run programs, open folders, search your computer, get help, and more. What you may not know is how to customize the Start menu so that it works the way you want it to.

TIP **You don't need to click in the Search box before you begin typing. Just type your search text and you'll see any matching results. The Search box also allows you to run programs. Simply type any program name in the box and press Enter to run the program. If you started a search and want to cancel it, click the blue x button to the right of the Search box or press Esc.**

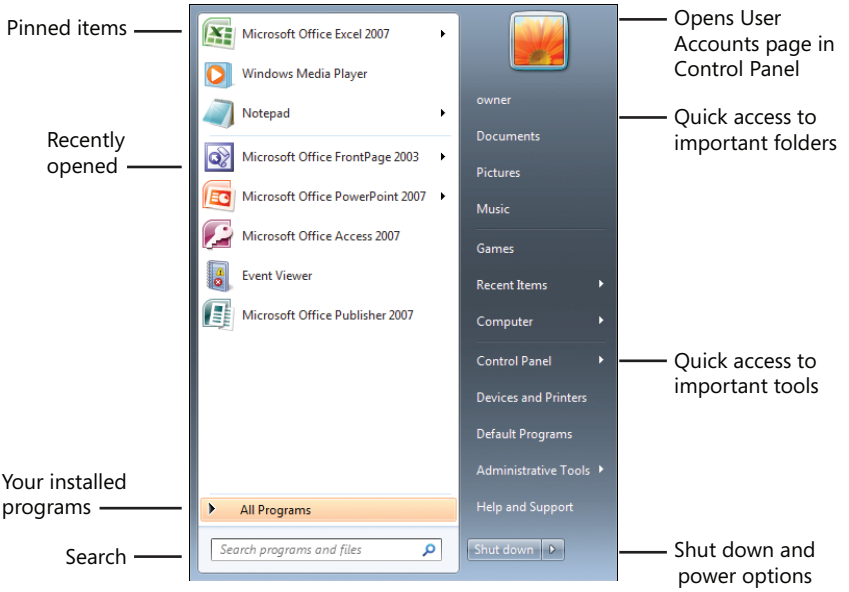

FIGURE 1-4 Getting the most from the Start menu

Customizing the Programs List

The left pane of the Start menu displays pinned programs and recently used programs. You can customize the programs list by pinning items to the Start menu and by changing the number of recently used programs to display.

Programs pinned to the Start menu are listed in the uppermost section of the programs list for quick access to your favorite programs. You can pin a program to the Start menu by following these steps:

1. Click Start, click All Programs, and then locate the program's menu entry.
2. Right-click the program's menu entry and click Pin To Start Menu.

REAL WORLD **Sometimes the program you want to pin is not readily accessed in the menu system. In this case, locate the application's executable file (.exe) in Windows Explorer. Right-click the file, and then select Pin To Start Menu.**

By default, pinned items are listed in the order in which they are added. You can rearrange pinned items by clicking them and dragging up or down until the desired list position is reached. If you no longer want a program to be pinned to the Start menu, you can unpin it by right-clicking its entry on the Start menu and selecting Unpin From Start Menu.

On the Start menu, recently used programs are listed in the lower portion of the programs list. You can remove a program from the recently used list by right-clicking it and then selecting Remove From This List. However, this won't prevent the program from being added to the list in the future.

You can customize the recent programs list by completing the following steps:

1. Right-click the Start button, and then select Properties.
2. In the Taskbar And Start Menu Properties dialog box, click Customize on the Start Menu tab. Set the Number Of Recent Programs To Display option to the desired value.
3. By using small icons instead of large icons, you can display more programs on the list. Scroll down the list of options and clear the Use Large Icons check box.
4. Save your changes by clicking OK twice.

You can remove the recent programs list and make this extra space available for pinned programs by completing the following steps:

1. Right-click the Start button and then select Properties.
2. Clear the Store And Display Recently Opened Programs In The Start Menu check box, and then click OK.

Customizing the Important Folders and Tools List

The right pane of the Start menu provides quick access to important folders and tools, such as Documents, Pictures, Music, and Control Panel. If you upgraded from an earlier version of Windows, you'll notice that some of the familiar folders don't exist in Windows 7 or have been renamed.

In Windows 7, your documents are stored by default in personal folders under *%HomeDrive%\%HomePath%*. You can quickly open your personal folder by clicking the entry on the Start menu that shows your user name.

Opening your personal folder gives you direct access to its subfolders, such as Documents, Pictures, and Music, so you don't need related entries on the Start menu. Therefore, one way to clean up Start menu clutter is to remove these unnecessary options. If you don't play the built-in Windows games, you can remove the Games options as well.

You can remove features from the Start menu's right pane by using the Customize Start Menu dialog box. Right-click the Start button, and then select Properties. In the Taskbar And Start Menu Properties dialog box, click Customize on the Start Menu tab. In the Customize Start Menu dialog box, you can remove unwanted items in two ways:

- Clear the related check box, such as the Default Programs option.
- Set their related list option to Don't Display This Item.

While you are working with the Customize Start Menu dialog box you may want to optimize other options as well. Here are some suggestions:

- **Computer** Display this as a menu so that you can more quickly open specific drives and removable media.
- **Control Panel** If you're not a fan of Category Control Panel, display this as a menu so that you can more quickly access specific Control Panel utilities.

- **Devices And Printers** Make sure you select this option, because it is the quickest way to get to your devices and printers.
- **Default Programs** Clear this option, because you'll hardly ever use it (and if you need it, it is in Control Panel).
- **Help** Select this option, because it may come in handy in a pinch.
- **Search Programs And Control Panel** Make sure you select this option, because the Search box is the quickest way to find programs and tools.
- **System Administrative Tools** If you have appropriate permissions, select Display On The All Programs Menu And The Start Menu so you have quicker access to system tools.

Below the common folder and feature buttons in the right pane of the Start menu, you'll find your computer's Shut Down button. When you click the Shut Down options button (the arrow to the right of "Shut down"), the available options include:

- **Switch user** Switches users so another user can log on
- **Log off** Logs off the computer and ends your user session
- **Lock** Locks the computer so that a logon screen is displayed
- **Restart** Shuts down and then restarts the computer
- **Sleep** Puts the computer in sleep mode, if possible given the system configuration and state

Your computer's power configuration determines whether and how sleep mode works. When working with sleep mode, it is important to remember that the computer is still drawing power and that you should never install hardware inside the computer when it is in the sleep state.

Making the Taskbar Dance

You use the taskbar to manage your programs and open windows. The taskbar displays buttons for pinned and open items that allow you to quickly access items you've opened and start applications.

Putting the Taskbar Where You Want It

By default, the taskbar is always displayed along the bottom of the desktop on your primary monitor. If you want to move the taskbar to another location, first make sure it is not locked, as indicated by a check mark. To unlock the taskbar, right-click it and clear the Lock The Taskbar option.

After you unlock the taskbar, you can position it wherever you want by clicking on it and dragging. You can:

- Drag the taskbar to the left or right to dock it on the left or right side of the primary desktop. Drag up to dock the taskbar to the top of the primary desktop.

- Dock the taskbar to a location on another monitor. Simply drag the taskbar to the desired left, right, top, or bottom location on the stretched desktop.

After you position the taskbar where you want it, you should lock it in position. To do this, right-click an open area of the taskbar, and then select the Lock The Taskbar option. A check mark indicates that it is locked.

Customizing Taskbar Appearance

You can customize other aspects of the taskbar by using the Taskbar And Start Menu Properties dialog box, shown in Figure 1-5. To access this dialog box, right-click an open area of the taskbar, and then select Properties. Select or clear options as desired and click OK to save your changes.

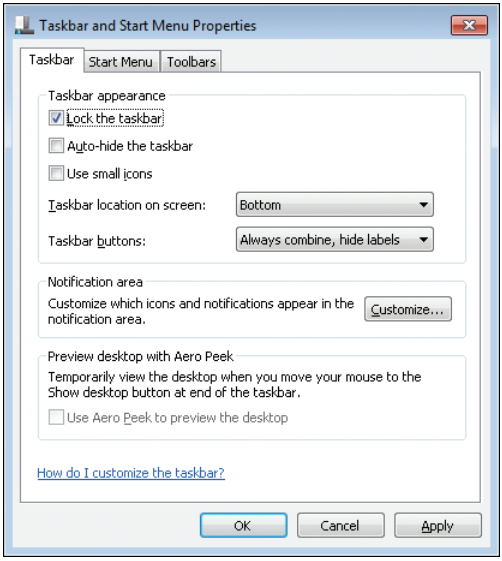

FIGURE 1-5 Customizing taskbar appearance

The available options include:

- **Lock The Taskbar** Locks the taskbar in place to prevent accidental moving or resizing. You must clear this option to move or resize the taskbar.
- **Auto-Hide The Taskbar** Hides the taskbar when you aren't using it and displays the taskbar only when you move the cursor over it. If you clear this option, the taskbar is always displayed (although not always on top), which you may prefer, especially if you move the taskbar around a stretched desktop.

TIP **If the taskbar is hidden and you forget where it is docked, you can quickly display the taskbar by pressing the Windows logo key.**

- **Use Small Icons** Reduces the size of taskbar buttons, allowing more buttons to fit on the taskbar. On my desktop PC, I prefer large icons, which makes them easier to click, but on my tablet PC, I prefer small icons so they take up less screen space.
- **Taskbar Location On Screen** Sets the relative location of the taskbar on the currently targeted display. As we discussed previously, you can move the taskbar manually as well when it is unlocked.
- **Taskbar Buttons** Specifies whether taskbar buttons are always combined, combined only when the taskbar is full, or never combined.
- **Use Aero Peek To Preview The Desktop** Enables the peek feature with the Show Desktop button. If you clear this option, Windows doesn't temporarily hide all open windows when you move the pointer over the Show Desktop button.

See the next section for more information on combining buttons and using related options.

NOTE **Typically, you'll want to combine similar items to reduce taskbar clutter. Rather than displaying a button for each program, the taskbar groups similar buttons by default. Grouping buttons saves room on the taskbar and helps reduce the likelihood that you'll need to expand the taskbar to find the buttons for open programs.**

Pinning Programs to the Taskbar

You can pin items that you work with frequently to the taskbar. Pinning an item to the taskbar creates a shortcut that allows you to quickly open a program, folder, or related window.

Pinning items is easy. If you know the name of the program you want to pin to the taskbar, click Start and start typing the program name in the Search box. When you see the program in the results list, right-click it, and then select Pin To Taskbar. From this point on, whenever you want to access the program, simply click the related icon on the taskbar.

Another way to find items to pin is to click the Start button, and then click All Programs. When you find the program you want to pin, right-click the program's menu item, and then select Pin To Taskbar.

To remove a pinned program from the taskbar, right-click its icon, and then select Unpin This Program From The Taskbar. This removes the program's button from the taskbar.

You can set the order of buttons for all opened and pinned programs. To do this, click the button on the taskbar and drag it left or right to the desired position.

When buttons are combined on the taskbar, clicking an item with multiple windows displays a thumbnail with a representation of each open window. You can

now rest your pointer over a window to peek at it on the desktop (as long as the appropriate Aero features are enabled) or click a window that you want to work with to open it. For example, if you open three different folders in Windows Explorer, these items are grouped together in one taskbar button. Resting your pointer over the taskbar button displays a thumbnail with an entry for each window, allowing you to select the grouped window to open by clicking it.

Taskbar buttons make it easy to close windows as well. To close a window, whether grouped or not, move the pointer over the related taskbar button. When the thumbnail appears, move the mouse pointer to the right, and then click the close button for the window you want to close.

REAL WORLD **The function of grouping and previews depends on whether your computer supports Windows Aero Glass and whether Windows Aero Glass is enabled. When you aren't using Aero Glass, moving the mouse pointer over an open program's button on the taskbar displays a menu with icons and titles for each open instance of the program. You can still switch to the window by clicking in it or close the window by moving the mouse pointer to the right and clicking the close button.**

Using Flip Views and Jump Lists

Flip views and jump lists are some of the most powerful features of Windows 7. Why? They allow you to quickly get to items that you want to work with.

Display the standard flip view by pressing Alt+Tab. As shown in Figure 1-6, the flip view contains live thumbnails of all open windows, which are continuously updated to reflect their current state. You can work with a flip view in a variety of ways. Here are a few techniques:

- Press Alt+Tab, and then hold Alt to keep the flip view open.
- Press Tab while you hold the Alt key to cycle through the windows.
- Release the Alt key to bring the currently selected window to the front.
- Select a window and bring it to the front by clicking it.

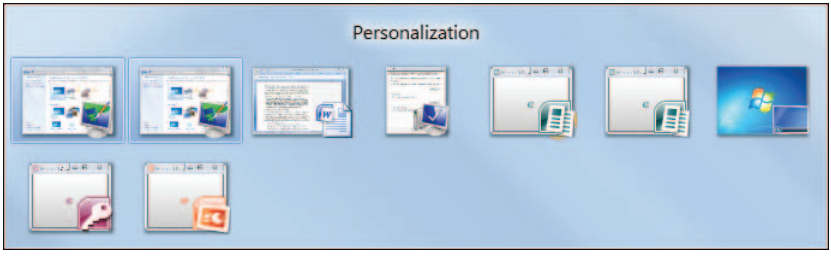

FIGURE 1-6 Using the flip view

Display the 3D flip view by pressing the Windows logo key and the Tab key. As shown in Figure 1-7, the 3D flip view contains a skewed 3D view of all open

windows that is continuously updated to reflect the current state. Key techniques for working with 3D flip view are as follows:

- Press the Windows logo key+Tab and hold the Windows logo key to keep the 3D flip view open.
- Press the Tab key while holding the Windows logo key to cycle through the windows.
- Release the Windows logo key to bring the currently selected window to the front.
- Select a window and bring it to the front by clicking it.

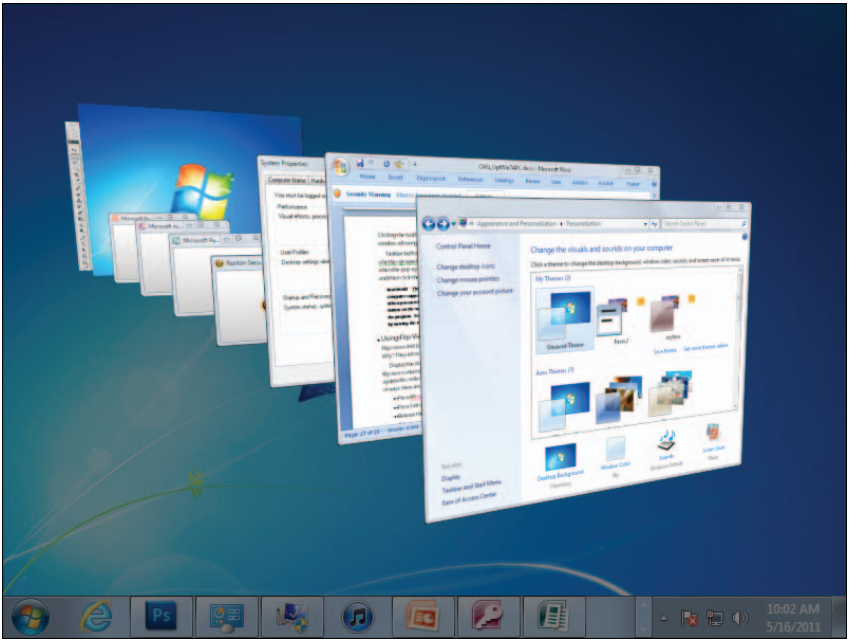

FIGURE 1-7 Using the 3D flip view

If you think flip views are cool, wait until you try jump lists. Jump lists are displayed after a short delay whenever you right-click and hover with the pointer over an item that has been pinned to the taskbar. When a program's jump list is displayed, you can select a file to open or task to perform simply by clicking it.

Most applications display recently used items or frequently used items. Some applications have enhanced jump lists that also provide quick access to tasks that you can perform with the application. The maximum number of recently or frequently used items on a program's jump list is configurable. By default, jump lists track up to 10 recent items.

You can specify the maximum number of items to display by following these steps:

1. Right-click the Start button, and then select Properties. In the Taskbar And Start Menu Properties dialog box, click Customize on the Start Menu tab.
2. In the Customize Start Menu dialog box, specify the number of recent items to display in jump lists, and then click OK twice.

Windows 7 also allows you to pin items to a program's jump list. To do this, drag an item associated with a program to the program's button pinned on the taskbar and release when the Pin To option appears. Consider the following real-world scenario:

- You want to pin Microsoft Word to the taskbar and pin important documents to its jump list. To pin Word to the taskbar, you click Start, type **Word.exe** in the Search box, right-click Word.exe in the results, and then select Pin To Taskbar.
- After pinning Word to the taskbar, you want to add important documents to its jump list. You open Windows Explorer, locate the first document, and drag the document file from the Explorer window to the Word button on the taskbar. When the Pin To Word option appears, you release the mouse button to add the first document to the jump list. You repeat this process to build your list.

Other ways to use jump lists include the following:

- If you pin Windows Explorer to the taskbar, you can add folders to its jump list. To pin Windows Explorer to the taskbar, click Start, type **Explorer.exe** in the Search box, right-click Explorer.exe in the results, and then select Pin To Taskbar. After you've pinned Windows Explorer to the taskbar, simply open Windows Explorer and locate and then drag an important folder from this window to the pinned Windows Explorer on the taskbar. When the Pin To Windows Explorer option appears, release the mouse button to add the folder to the jump list. Repeat this process to build your list.
- If you pin Control Panel to the taskbar, you can add frequently used tasks to its jump list. To pin Control Panel to the taskbar, click Start, type **Control Panel** in the Search box, right-click Control Panel in the results, and then select Pin To Taskbar. After you've pinned Control Panel to the taskbar, simply open Control Panel, locate an important task, and then drag the link for the task to the pinned Control Panel on the taskbar. When the Pin To Control Panel option appears, release the mouse button to add the task to the jump list. Repeat this process to build your list.

Index

Symbols and Numbers

<< (chevrons), 69
16-bit programs, 106–07
32-bit processor, 124–25
3D flip views, 15–16
3D Text screen saver, 31, 33–34
64-bit processor, 102–04, 124–25

A

access tokens, 96
account controls. *See* User Account Control (UAC)
account name, 41
accounts. *See* administrator accounts; standard user accounts; user accounts
ACPI (Advanced Configuration and Power Interface), 51–52
Action Center, 135–38, 140–42
adding
    desktop icons, 5
    desktop shortcuts, 4
    monitors, 6–9
address bar, 67–70
Admin Approval Mode, 96, 98
administrator accounts, 21–22, 25, 96
    command prompt for, creating, 42
    passwords, changing, 42
    setting security policies, 96–98
Advanced Configuration and Power Interface (ACPI), 51–52
Advanced Options (boot option), 56
Aero Glass, 2, 15, 27
Aero Peek, 4
alert messages, 136, 148
All Programs menu, 14, 20
all-user configuration, 107
Alt key, 70
Alt+Enter key combination, 70
Alt+Left Arrow key combination, 71
Alt+P key combination, 71
Alt+Tab key combination, 15
Alt+TAB key combination, 76
Alt+UP Arrow key combination, 71
AND (logical operator), 84
animations, 1–3
appearance, configuring for best, 1–2
applications
    legacy, 96
    startup, disabling, 57–58
    stopping, 128
    tracking, 126–28
    UAC-compliant, 96
applications and services logs, 131
Auto-Hide The Taskbar (taskbar property), 13
AutoPlay, 99–100
Autorun, 95, 99–101

B

Back buttons, 71
background processes, 126
backgrounds, desktop, 9, 28–30
bandwidth, 144, 153–54
Base Priority (Task Manager), 127
Base Video (boot option), 57
baseline performance levels, 121–23
Basic Input Output System (BIOS), 45
BCD Editor, 60–63
BIOS (Basic Input Output System), 45
blank screen saver, 31
Boolean searching, 84
boot configuration
    advanced, 53
    changing
        permanently, 57
        temporarily, 54, 56–57
    configuring startup, 53–56
    customizing with BCD Editor, 60–63
boot configuration data (BCD) store, 46–47
boot loader, 50–51, 60, 63
Boot Log (boot option), 56
boot manager, 50
Boot Options submenu options, 49
boot order, 48, 63
Boot tab (System Configuration utility), 54
Bootsector, 62
bubbles screen saver, 31

C

Cache (Performance object), 148
caching, 151, 171–73
calendar, searches using, 87
Cascade Windows (desktop option), 4
categories, background image, 30
Center positioning option, 30
Change Picture Every list, 30
changing
    account name, 41
    account passwords, 43
    account types, 43
    themes, 27
check boxes, 77
Check Disk, 64, 125, 174–76
chevrons (<<), 69
cleaning disk drives, 173–74
cmd.exe, 25
cold start, 50–51
color
    profiles, 39–40
    Windows Aero, 27–28
Color Management dialog box, 39–40
command prompt
    administrator, 25
    power plans, managing, 160–61
Commit value, 131
compatibility issues
    64-bit processor, 104
    checking for, 102
    power plan, 162
    troubleshooting, 109–12
    with legacy applications, 96, 106–07
Computer (base location), 69
Computer (Start Menu), 11
Computer icon, 6
Computer Management console, 6
configuring
    16-bit or MS-DOS programs, 107
    custom folder views, 72–74
    for best appearance, 1–2
    for best performance, 1–2
    global defaults, 113
    mouse pointers, 36–37
    screen savers, 31–34
    security policy settings, 98
    software, 95, 115
    sounds, 34–35
    startup, 53–54
    virtual memory, 169–70
    visual effects, 1–4
consent prompt, 22
Contents view pane (Windows Explorer), 67
Control Panel, 20–21, 24–25, 79
Control Panel (base location), 69
Control Panel (Start Menu), 11, 17
Control Panel icon, 5
Control+Esc key combination, 9
Copy As Path option, 70–71
counters, performance, 146, 148–50, 153
CPU (Resource Monitor), 144
CPU Time (Task Manager), 127
CPU usage graphs, 128–31
creating
    account passwords, 43
    administrator command prompt, 25
    alternate Control Panel, 24–25
    background images, 28
    BCD Editor entries, 62
    event log filters, 133–34
    folders, 71
    power plans, 161–62
    Show Desktop button, 6
Ctrl+Alt+Delete key combination, 43, 64, 104, 116
Ctrl+C key combination, 148
Ctrl+F key combination, 148
Ctrl+G key combination, 147
Ctrl+H key combination, 148
Ctrl+I key combination, 147
Ctrl+L key combination, 147
Ctrl+Q key combination, 148
Ctrl+Shift+E key combination, 71
Ctrl+Shift+Esc key combination, 59, 116, 126
Ctrl+Shift+N key combination, 71
Ctrl+Spacebar key combination, 72
Ctrl+T key combination, 147
Ctrl+U key combination, 148
Ctrl+V key combination, 148
customizing
    3D Text screen saver, 33–34
    boot configuration, 60–63
    display settings, 38–40
    folder options, 74–78
    folder views, 72–74
    photos screen savers, 32–33
    Programs list, 10–11
    search options, 80–82
    Start menu, 9–12
    taskbar appearance, 13
    Windows Aero colors, 27–28
    Windows Search service, 80–82, 91–93

D

Data Execution Prevention (DEP), 170–71
Date, searching by, 86–89
Datemodified (search filter), 82
debugging settings, global (boot), 61
dedicated graphics memory, 125–26
Default Programs (Start Menu), 12
defragmenting disks, 125, 177
Delete (boot option), 56
Delete key, 148
deleted items
    removing, 6
    restoring, 6
deleting
    BCD Editor entries, 62
    desktop icons, 5
    permanently, files and folders, 71
    pinned items, 10
    Start menu features, 11
    temporary files, 173–74
    themes, 38
DEP (Data Execution Prevention), 170–71
desktop
    backgrounds, 9, 28–30
    decluttering, 4
    file and folder shortcuts on, 4
    icons, 5
    performance, optimizing, 1–4
    searches, 79
    secure, 22
    stretching, across two monitors, 7–9
Desktop (base location), accessing, 69
Desktop Background page, 29–30
desktop icons, 5–6
Details view pane (Windows Explorer), 68
device drivers, 144, 165
Device Manager, 143–44
devices
    accessing, 5–6
    troubleshooting, 143–44
Devices and Printers (Start Menu), 12
diagnostic startup mode, 55–56
DirectX, 123
Disable Automatic Restart On System Failure (Safe Mode option), 59
Disable Driver Signature Enforcement (Safe Mode option), 59
disabling
    features, 105, 168
    startup applications, 57–58
    system services, 167–68
Disk (Resource Monitor), 144
Disk Cleanup, 173–74
Disk Defragmenter, 176
disk drives, 48, 76, 171–76. *See also* hard disk drives
display adapters, 6–7
Display Color Calibration tool, 40
Display Quality troubleshooter, 141
display settings, 38–40, 111
displaying
    hidden taskbar, 13
    Preview pane, 71
    Start menu, 9
    text on screen saver, 33–34
    time on screen saver, 34
displays, multiple monitor, 6–9
Documents template, 72
drive letters, 76
drivers. *See* device drivers; graphic card drivers
drop-down list boxes, 3
Duplicate These Displays, 8

E

EFI (Extensible Firmware Interface), 45, 61
elevation, 22, 95
Emergency Management Settings, 61
Enable Boot Logging (Safe Mode) option, 59
Enable Desktop Composition feature, 4
Enable Low Resolution Video (Safe Mode option), 59
energy report, 162–63
errors, disk drive, checking for, 174–76
event logs, 131–34
Experience Index, Windows. *See* Windows Experience Index
Extend These Displays, 8
Extensible Firmware Interface (EFI), 45

F

F1 key, 148
F12 key, 53
F2 key, 47
F8 key, 53
failures, troubleshooting, 135–41
file extensions, hiding, 76
file types
    associated, 112, 114–15
    default, 113–14
    indexing by, 92–93

files
compressed, 77, 80
corrupted system, 64–65
deleting, 71, 173–74
desktop shortcuts, adding, 4
encrypted, 77
hidden, 76
indexing of, 79
offline, 92
operating system, 76
search filters for, 90–91
searching, 80
shortcuts for, 70–72
system, 82
temporary, 173–74
Fill positioning option, 30
filters
event log, 133–34
search, 82–91
usage, 145
firewall, 141
firmware, 45–50
Fit positioning option, 30
flash devices, 125, 171–73
flip views, 15–16, 76
floppy drives, 48
folder contents, viewing, 71
Folder Options dialog box, 74–78
folder trees, 71
folders
desktop shortcuts, adding, 4
hidden, 76
indexing, 79
network, 6
opening, 11, 71
organizing, 74–78
search, 91
shortcuts for, 71–72
user profile, 6
Forgotten Password Wizard, 43–44
Forward buttons, 71
fragmentation, 176

G

gaming graphics, 121
Gaming Graphics (Windows Experience Index), 120
General tab (System Configuration utility), 54
graphic card drivers, 38–39
Graphics (Windows Experience Index), 120
graphics adapter, 120
graphics card, 121, 123
graphics memory, 120–21, 125–26
graphics processing units (GPUs), 123
Group Policy settings, power plans, 160
GUIDs (globally unique identifiers)
alternate Control Panel, 24–25
BCD store identifiers, 61–62

H

Handles (Task Manager), 127
hard disk drives
accessing, 6
cleaning, 173–74
I/O activity, 153
primary, 120, 125
rating, 121
troubleshooting, 153
hard page faults, 128, 152
Hardware and Devices troubleshooter, 141
Help (Start Menu), 12
hibernate mode, 63, 160, 162
hiding
desktop windows, 4
Preview pane, 71
High Contrast theme, 26
histogram bar view, 150
Homegroup troubleshooter, 141
hybrid sleep state, 159, 162

I

I/O activity, 153
I/O Reads/I/O Writes (Task Manager), 127
icons
desktop, 5–6
file, 75
images
background
categories, 30
changing logon screen, 30
creating, 28
deselecting, 29
multiple, 29–30
positioning, 30
resizing, 28
shuffling, 30
screen saver, shuffling, 33
user account, 41–42
wallpaper, 28
Incoming Connections troubleshooter, 141

indexing, 79, 91–94
Indexing Options dialog box, 92
installer programs, 101–02, 104
installing
    device drivers, 144
    graphic card drivers, 39
    monitor drives, 38–39
    software, 95, 106–09
    updates, 165–66
    Windows XP Mode, 109
InstallShield, 101
instances, performance object, 149–50
interactive processes, 126
Internet Connections troubleshooter, 141
Internet Explorer Performance troubleshooter, 141
Internet Explorer Safety troubleshooter, 142

J

jump lists, 16–17

K

kernel memory, 131
keyboard shortcuts, 70–72
keywords, 84, 86
Kind
    (search filter), 83, 85–86

L

Last Known Good Configuration (Safe Mode option), 59
latency, network, 153
legacy applications, 96, 102, 105–07
legends, 147
libraries, 69, 79, 85, 92
list views, 77–78
live preview, 27
Load Startup Items, 56
Load System Services, 55
Location Indicator icon, 69
Location Path entries, 68–70
locations, indexed, 91–94
Lock option (Start Menu), 12
Lock The Taskbar option, 12–13
Lock The Taskbar option (taskbar property), 13
Log off option (Start Menu), 12
logging off, 64
logical operators, 84, 88–89
LogicalDisk (performance object), 148
logon, 51
logon screen, 30

M

Maintenance troubleshooter, 141
managing
    Data Execution Prevention (DEP), 170–71
    installed software, 112–15
    power plans, 160–61
    software installation, 112–15
Map Network Drive, 6
media files, 99–100
Memory (Performance Monitor), 149, 151–52
memory (RAM), 130–31
    graphics, 120–21, 125–26
    paged pool, nonpaged pool, 128, 152
    peak working set, 128
    statistics, 130–31
    troubleshooting, 151–52
    usage graphs, 128–31
Memory (RAM) (Windows Experience Index), 120
Memory (Resource Monitor), 145
menus, 3, 20, 75
Microsoft Office Outlook, 92
Microsoft Update, 164–65
Microsoft, reporting problems to, 137
mixer, color, 28
monitors
    drives, installing, 38–39
    multiple, 6–9, 40
mouse pointers, 36–37
msconfig.exe, 54
MS-DOS programs, 106–07
Multithreading, 128
music, search filters for, 89–90
mystify screen saver, 31

N

natural language search, 80
navigation paths, 69
Navigation view pane, 67
Network (base location), 70
Network (Resource Monitor), 144
Network Adapter troubleshooter, 141
network boot, 48
network cards, 153–54
network drives, connecting to, 6

Network icon, 5
Network Interface (Performance Monitor), 149, 153–54
network locations, network path to, 68
network paths, 68
Network window, search in, 79
networking components, 153–54
No GUI Boot (boot option), 56
nonpaged pool memory usage, 128, 152
NOT (logical operator), 84
notifications
    Action Center, 136–37
    User Account Control (UAC), 23–24
Ntldr (boot loader application), 60

O

Object (Performance Monitor), 149
objects, performance, 148–50
Offline files location, 92
Open Command Windows Here option, 71
opening
    Action Center, 136
    desktop windows, 4
    folders, 11, 71
    items, 75
    Performance Monitor, 147
operating systems, 46–47, 50–51, 56–57
OR (logical operator), 84
orientation, monitor, 8
OS Boot Information (boot option), 57
OSLoader, 62
Osloader (boot loader application), 60
Outlook, Microsoft Office, 92
Overview tab (Resource Monitor), 145

P

page faults, 128, 152
Page Faults (Task Manager), 128
paged pool memory usage, 152
Paged Pool, Nonpaged Pool (Task Manager), 128, 152
Paging File (Performance Monitor), 149
paging files, 125, 168–70
passwords
    account, 42–43
    changing, 43
    firmware interface, 47
    recovering, 44
    screen saver, 32
    storing, 43–44
Path Selection list button, 69
Peak Working Set (Task Manager), 128
performance
    automatic updates, 164–67
    configuring for best, 1–2
    data, logging, 146–50
    disk drive, 176
    levels, checking, 126–31
    ReadyBoost, 125, 171–73
    relative
        checking, 128–31
        improving, 123–26
        rating, 120–23
    reliability, 138–41
    tools, 135
    troubleshooting, 127–28, 133–34, 151–54
performance counters, 146, 148, 153
Performance Information and Tools, 120, 123–26
Performance Monitor, 135, 146–50
performance objects, 148–50
Performance Options dialog box, 2
Performance tab (Task Manager), 128–31
Performance troubleshooter, 141
Permissions icon, 22
personalization settings
    accessing, 25
    color, 27–28
    desktop backgrounds, 28–30
    displays, 38–40
    mouse pointers, 36–37
    screen savers, 31–34
    sounds, 34–35
    themes, 37–38
per-user configuration, 107
photos screen saver, 31–33
physical memory. *See* memory (RAM)
PhysicalDisk (Performance Monitor), 149, 153
Picture Position option, 30
Picture, search filters for, 89
pictures. *See* images
Pictures Library option, 29
Pictures template, 72
Pin to Start Menu feature, 10–11
Pin To Taskbar feature, 14, 17
pinned items, 10–11, 70
Playing Audio troubleshooter, 141
pointers, 36–37
positioning background images, 30
power management settings, 52, 155–64
Power OnSelf Test (POST), 50

power plans
compatibility issues, 162
creating, 161–62
Group Policy settings, 160
managing, 160–61
selecting, 155–60
power states, 51–52
Power troubleshooter, 141
Powershell, 103, 142
Preview pane, 71, 77
Preview view pane (Windows Explorer), 68
Previous Locations button, 69–70
Primary Hard Disk (Windows Experience Index), 120
Print Queue (Performance Monitor), 149
Printer troubleshooter, 141
privileges
elevated, 96, 111
Run As Administrator
pinning to taskbar, 25
setting, 23
software installation, 101
problem reports
settings for, 137
viewing, 140
Process (Performance Monitor), 149
processes
background, 126
ending, 116
interactive, 126
stopping, 128
tracking, 126–28
Processes tab (Task Manager), 126–28
Processor (Performance Monitor), 149, 152, 154
Processor (Windows Experience Index), 120
Processor \%Processor, 152
processors
32-bit, 124–25
64-bit, 102–04, 124–25
troubleshooting, 151–54
Program Compatibility Assistant, 102, 105, 109–12
Program Compatibility troubleshooter, 141
programs
default, 112–15
partially installed, 102
pinned, removing from taskbar, 14
recently used, removing from Programs list, 10–11
restricting, 108
starting, 9, 105
uninstalling, 115
user access, configuring, 107–08
viewing active, 116–17
Programs list, 10–11
properties
file, locating, 83–84
item, displaying, 70

R

RAM (memory). *See* memory (RAM)
ReadyBoost, 125, 171–73
Recent Pages drop-down list, 71
recently used items, 10–11, 16–17
Recording Audio troubleshooter, 141
recovery settings, 53–54
Recycle Bin, 6, 70, 79
refresh rates, 38
registry keys, 104
Reliability Monitor, 135, 138–41
removing
deleted items, 6
flash drives, 173
pinned items from taskbar, 14
recent program list, 11
renaming
desktop icons, 5
folders, 71
Repair Your Computer (Safe Mode option), 59
report view, 150
reporting, unresolved problems to Microsoft, 137
resizing
background images, 28
windows, 4
Resource Monitor, 135, 144–45
Restart Manager, 135
Restart option (Start Menu), 12
restart, troubleshooting, 63–65
restoring
deleted items, 6
updates, 167
Resume (boot loader application), 62
resuming, 51, 63–64
ribbons screen saver, 31
RSS feeds, 85, 92

S

Safe Boot (boot option), 56, 58–60
Safe Mode, 59–60, 64

saving
reliability history, 140
searches, 91
themes, 37
screen savers, 9, 31–34
search filters, 82–91
Search Programs and Control Panel (Start Menu), 12
search syntax, 83
searches
basic, 78
canceling, 9
customizing, 80–82
date-related filters for, 86–89
filters for, 82–91
indexedvs non-indexed, 80–82
localized, 79
logical operators, 84, 88–89
saving, 91
size-related filters for, 89–91
stopping, 78
security, account, 40–44, 96–98
selecting
files and folders, multiple, 71–72
multiple background images, 29
performance counters, 149–50
power plans, 155–60
themes, 26–27
selective startup mode, 55–56
services. *See* system services
Services tab (System Configuration utility), 54
Set As Default (boot option), 56
Setup programs, 95, 99–105
shared resources, network path to, 68
shared system memory, 125
sharing
files and folders, 69, 77
network, 69
themes, 37–38
Shift+Ctrl key combination, 71
Shift+right click combination, 71
Shift+Spacebar key combination, 72
shortcuts
desktop, 4
folder, 71–72
keyboard, 70–72
Performance Monitor toolbar, 147–48
Show Desktop button, 4, 6, 14
Show Windows Side by Side (desktop option), 4
Show Windows Stacked (desktop option), 4
Shut Down button, 12, 63
shutdown, forcing, 64
Size
(search filter), 83, 89–91
Sleep mode (Start Menu), 12
sleep state, 12, 63, 156–60, 162–64
Slide Show Speed list, 32
slideshows, 31
snapshots, 63
soft page faults, 128, 152
software installation, 95, 106–09
downloaded, 104–05
managing, 112–15
reconfiguring, 115
troubleshooting, 106–07, 136–37
Solid Colors option, 29
Sound dialog box, 34–35
sounds, 34–35
stability issues, 138–41
standard user accounts, 21, 42, 96
Start button, 9
Start menu
animations in, controlling, 3
customizing, 9–12
displaying, 9
pinning items to, 70
removing items from, 11
search, 79
searching, 92
starting
Disk Cleanup, 115
programs, 9, 105
ReadyBoost, 172
Safe Mode, 59–60
troubleshooters, 142
startup
applications, disabling, 57–58
configuring, 53–54
diagnostic mode, 55–56
normal mode, 55, 57, 64
problems, identifying, 51
selective mode, 55–56
Startup (boot loader application), 62
Startup And Recovery dialog box, 53–54
Startup Repair tool, 64–65
Startup tab (System Configuration utility), 54
status panel, 129
storing
files and folders, 4
indexed locations, 94
passwords, 43–44
Stretch positioning option, 30

subfolders, 72, 75, 80–81
suspend mode, 52
Switch User option (Start Menu), 12
System (Performance Monitor), 149
System Administrative Tools (Start Menu), 12
system cache, 148, 152, 171–73
System Configuration utility, 54
system files, 82
System Idle Process, 128
System page, accessing, 6
System Properties dialog box, 2
System Restore, 65, 102
system services
  disabling, 167–68
  load, 55
  troubleshooting, 58–60
system type, 102
System\Processor Queue Length, 152

T

Task Manager, 64, 116–17, 126–31
taskbar, 12–15
  animations in, controlling, 3
  appearance, 13–14
  buttons
    closing windows, 15
    grouping, 14
    ordering, 14
  hidden, displaying, 13
  pinning items to, 14–56
  positioning, 12–13
  properties, 13–14
Taskbar And Start Menu Properties dialog box, 13
Taskbar Buttons (taskbar property), 14
Taskbar Location On Screen (taskbar property), 14
templates, folder, 72–74
text, displaying, on screen saver, 33–34
themes, 25–27
Thread (Performance Monitor), 149
Threads (Task Manager), 128
thumbnails, 75
Tile positioning option, 30
time, displaying, on screen saver, 34
Timeout (boot option), 56
Tools tab (System Configuration utility), 54
tooltips, 3, 75, 77
Top Rated Photos option, 29
transparency, 3, 27
troubleshooters, 141–43
troubleshooting
  compatibility issues, 109–12
  device drivers, 136
  event logs for, using, 133–34
  failures, 135–41
  hard disk drives, 153
  memory (RAM), 151–52
  multiple monitors, 7
  performance, 127–28, 151–54
  power management settings, 163–64
  processors, 151–54
  restart, 63–65
  security, 136
  software installation, 106–07, 136–37
  startup, 64–65
  system services, 58–60
  updates, 166–67
  virtual memory, 151
  Windows components, 115–16
  Windows Search service, 94
Type
  (search filter), 83, 85–86

U

UEFI (Unified Extensible Firmware Interface), 45, 47
UIAccess (User Interface Accessibility), 97
Unified Extensible Firmware Interface (UEFI), 45, 47
uninstalling
  device drivers, 144
  programs, 115
  updates, 167
Unpin From Start Menu, 10
updates, 164–67
  automatic, 143, 165
  recommended, 165
  troubleshooting, 166–67
usage filter, 145
USB (Universal Serial Bus) devices, 43, 48, 171–73
Use Aero Peek to Preview The Desktop (taskbar property), 14
Use Original Boot Configuration, 56
Use Small Icons (taskbar property), 14
User Account Control (UAC), 22–24, 95–98
  accessing, 23
  notifications, 23–24
  prompts, 21–24
  security policy settings, 96–98

user accounts, 40–44
accessing, 40
administrator, 21
changing type of, 42–43
pictures, 41–42
standard, 21, 42
User Interface Accessibility (UIAccess), 97
Users location, 92

V

value bar, 147
Video template, 72
videos, search filters for, 89–90
View button, 67
View options, 67, 69–70
viewing
active programs, 116–17
event logs, 132
folder contents, 71
troubleshooters, 142–43
virtual memory configuration, 168–69
views, folder, 72–74
virtual memory, 131, 151, 168–70
visual effects, 1–4

W

Wait control, screen saver, 32
wake events, 52
Wake On LAN power option, 52
wallpaper, 9, 28
Window Boot Sector, 60
windows
cascading, 4
closing, using taskbar buttons, 15
controlling animations for, 3
desktop
hiding, 4
opening, 4
transparent, 4
dragging, on multiple monitors, 9
folder, launching, 76
resizing, 4
Windows Aero, 27–28, 36, 123, 141
Windows Basic theme, 26–27
Windows Black pointers, 36
Windows Boot Loader, 46, 60–61
Windows Boot Manager, 46–47, 56, 60–61
Windows Classic theme, 26–27
Windows Desktop Backgrounds
options, 29
Windows Display Driver Model
(WDDM), 123
Windows Error Recovery screen, 64–65
Windows Experience Index
Windows Explorer, 17
accessing, 6
features, 67–68
folder options, 74–78
Windows Firewall, 141
Windows Flip, 27
Windows Installer, 101
Windows Installer Cleanup utility, 115
Windows Live Photo Gallery, 33
Windows Logon Manager, 51
Windows logs, 131–32
Windows Media troubleshooter, 142
Windows PowerShell, 103, 142
Windows ReadyBoost, 125, 171–73
Windows Recovery Environment
(Windows RE), 65
Windows Resume Loader, 60, 63–64
Windows Search service, 78–94
indexed locations, customizing, 91–93
troubleshooting, 94
Windows Standard
pointers, 36
themes, 27
Windows Update, 142, 164–65
Windows Virtual PC, 109
Windows XP Mode, 106, 108–09
Wise Installer, 101

Y

Your Account (base location), 69