

A Compact Guide to Windows Vista



Windows Vista

Pocket Reference

O'REILLY®

Preston Gralla

Windows Vista Pocket Reference



This pocket reference is a quick guide to the Windows Vista features you'll need most. Packed with tips, shortcuts, and other useful tidbits, this book lets you decide how you want Vista to work. Its five chapters include:

- **A Crash Course in the Basics:** Describes what's new, compares Windows Vista's five editions, and offers a tour of the desktop, files and folders, menus, and more.
- **Shortcuts:** Lists the keyboard and mouse shortcuts for every aspect of Windows Vista, including hot keys for IE 7 and Windows Mail.
- **Windows Components, Features, and Settings:** Provides an encyclopedia of everything you can do with the OS out of the box—including the user interface, filesystem, search, networking, security, and multimedia.
- **Registry Tweaks:** Gives an overview of Vista's registry, explains its structure and value types, and offers several hacks.
- **The Command Prompt:** Lists the most important commands and how to use them.

Small enough to fit in your pocket or laptop case, this perfect go-anywhere guide will help you master the basics of Windows Vista right away.

Preston Gralla, author of *Windows Vista in a Nutshell*, is the editor of *WindowsDevCenter.com*. Once a tech columnist for the *Dallas Morning News*, he's written for several major publications, including *PC Magazine*, *Computerworld*, the *Los Angeles Times*, and *USA Today*. He has published more than 30 books.

www.oreilly.com

US \$12.99

CAN \$16.99

ISBN-10: 0-596-52808-6

ISBN-13: 978-0-596-52808-9

5 1 2 9 9



Windows Vista

Pocket Reference

Windows Vista

Pocket Reference

Preston Gralla

O'REILLY®

Beijing • Cambridge • Farnham • Köln • Paris • Sebastopol • Taipei • Tokyo

Windows Vista Pocket Reference

by Preston Gralla

Copyright © 2007 Preston Gralla. All rights reserved.
Printed in the United States of America.

Published by O'Reilly Media, Inc., 1005 Gravenstein Highway North,
Sebastopol, CA 95472.

O'Reilly books may be purchased for educational, business, or sales promotional use. Online editions are also available for most titles (safari.oreilly.com). For more information, contact our corporate/institutional sales department: (800) 998-9938 or corporate@oreilly.com.

Editor: Brian Jepson

Production Editor:

Rachel Monaghan

Copyeditor: Audrey Doyle

Proofreader: Rachel Monaghan

Indexer: John Bickelhaupt

Cover Designer: Karen Montgomery

Interior Designer: David Futato

Illustrators: Robert Romano and
Jessamyn Read

Printing History:

February 2007:

First Edition.

Nutshell Handbook, the Nutshell Handbook logo, and the O'Reilly logo are registered trademarks of O'Reilly Media, Inc. The *Pocket Reference* series designations, *Windows Vista Pocket Reference*, the image of a European common frog, and related trade dress are trademarks of O'Reilly Media, Inc.

Many of the designations used by manufacturers and sellers to distinguish their products are claimed as trademarks. Where those designations appear in this book, and O'Reilly Media, Inc. was aware of a trademark claim, the designations have been printed in caps or initial caps.

While every precaution has been taken in the preparation of this book, the publisher and author assume no responsibility for errors or omissions, or for damages resulting from the use of the information contained herein.

ISBN-10: 0-596-52808-6

ISBN-13: 978-0-596-52808-9

[C]

Contents

Introduction	vii
Chapter 1: A Crash Course in the Basics	1
What's New in Windows Vista	1
Windows Vista Editions	8
Hardware Requirements	12
Windows System Performance Rating	13
The Desktop	15
Point-and-Click Operations	16
Windows and Menus	17
Files, Folders, and Disks	23
Chapter 2: Shortcuts	28
Working with Files and Objects	28
Starting Up Applications	30
Keyboard Shortcuts	32
Internet Explorer Hot Keys	42
Windows Mail Hot Keys	43

Chapter 3: Windows Components, Features, and Settings	46
The User Interface	46
Filesystem, Drives, Data, and Search	62
Internet Explorer and Windows Mail	70
Networking, Wireless, and Mobility	75
Security	83
Hardware	87
Managing Programs, Users, and Your Computer	95
Performance and Troubleshooting	102
Graphics and Multimedia	113
 Chapter 4: Registry Tweaks	 118
Registry Editor Crash Course	118
Registry Structure	119
Value Types	121
Registry Protection in Windows Vista	124
Registry Tweaks	125
 Chapter 5: The Command Prompt	 130
Wildcards, Pipes, and Redirection	131
Command Prompt Commands	132
 Index	 171

Introduction

This pocket reference is intended to provide the information Windows Vista users need most often in a quick and concise format. This tiny volume is small enough to fit in your pocket or laptop case, yet it is packed with hundreds of tips, shortcuts, and other tidbits of information that will make Windows Vista easier to use.

Less-experienced Windows Vista users should turn to the brief crash course in Chapter 1 of the book. If you're a hands-on learner, you should be able to pick up any of the concepts discussed there in no time at all. Chapter 2 lists dozens of keyboard and mouse shortcuts available for every aspect of Windows Vista, and Chapter 3 provides a listing of the most useful components, features, and settings that make up Windows Vista—an encyclopedia of everything you can do with Windows out of the box. Chapter 4 highlights how to use the Registry, along with several Registry hacks, while Chapter 5 documents the most important command-line prompts and how to use them.

Anyone wishing to learn more will benefit from the additional background and details provided by full-size books such as my recently published book, *Windows Vista in a Nutshell*, also available from O'Reilly.

Conventions Used in This Book

The following typographical conventions are used in this book:

Constant width

Used to indicate anything to be typed, as well as command-line computer output, code examples, Registry keys, and keyboard accelerators (discussed below).

Constant width bold

Used to indicate user input.

Constant width italic

Used to indicate variables in examples and so-called “replaceable” text. For instance, to open a document in Notepad from the command line, you’d type `notepad filename`, where *filename* is the full path and name of the document you wish to open.

[Square brackets]

Square brackets around an option (usually a command-line parameter) mean that the parameter is optional. Parameters and keywords not shown in square brackets are typically mandatory. If you see two or more options separated by the | character, it means that they are mutually exclusive; only one or the other can be specified, but not both.

Italic

Used to introduce new terms and to indicate URLs, variables in text, file and folder/directory names, and UNC pathnames.

Rather than using procedural steps to tell you how to reach a given Windows Vista user interface element or application, I use a shorthand path notation. For example:

Start → Programs → Accessories → Calculator

means “Open the Start menu (on the Desktop), then choose Programs, then choose Accessories, and then click Calculator.” The path is always relative to a well-known location, such as the following:

Control Panel

Start → Control Panel (in the Windows Vista-style Start menu)

Start → Settings → Control Panel (in the Classic Start menu)

My Computer, My Network Places, Recycle Bin

The familiar Desktop icons by these names, any of which may or may not be visible, depending on your settings

Start

The Start button on the Taskbar

Windows Explorer/Explorer

The two-pane folder view, commonly referred to as simply “Explorer”: Start → Programs → Accessories → System Tools → Windows Explorer

xxxx menu

Menu xxxx in the application currently being discussed (e.g., File, Edit)

Note that the elements of the Control Panel may or may not be divided into categories, depending on context and a setting on your computer. So, rather than a cumbersome explanation of this unfortunate design every time the Control Panel comes up, the following notation is used:

Control Panel → [Performance and Maintenance] → Scheduled Tasks

where the category (in this case, Performance and Maintenance) is shown in square brackets, implying that you may or may not encounter this step.

We'd Like to Hear from You

Please address comments and questions concerning this book to the publisher:

O'Reilly Media, Inc.
1005 Gravenstein Highway North
Sebastopol, CA 95472
800-998-9938 (in the U.S. or Canada)
707-829-0515 (international/local)
707-829-0104 (fax)

There is a web page for this book, which lists errata, examples, or any additional information. You can access this page at:

<http://www.oreilly.com/catalog/9780596528089>

To comment or ask technical questions about this book, send email to:

bookquestions@oreilly.com

For more information about our books, conferences, resource centers, and the O'Reilly Network, see the O'Reilly web site at:

<http://www.oreilly.com>

A Crash Course in the Basics

The following brief sections tell you what's new in Windows Vista, illustrate the layout of the Windows Vista interface, and identify the important concepts and components. Continue to Chapter 2 for tips and shortcuts for working with files, windows, and applications.

What's New in Windows Vista

Windows Vista is a significant rework of Windows, and although the basics of Windows are the same, much has changed. Here are the most significant additions and changes in Windows Vista compared to Windows XP:

Windows Aero interface

The new interface is the first thing people will notice when they see Windows Vista on a Vista Premium-ready system. It sports customizable, translucent windows (called *Aero Glass*); live Taskbar thumbnails that show a live preview of an underlying window when a mouse is held over the tile; and Windows Flip and Windows Flip 3D, which show thumbnails of open windows as you flip through them. As the name implies, Windows Flip 3D, shown in Figure 1-1, shows the thumbnails in three dimensions. Note that Windows Aero is not available on the least expensive versions of Windows Vista, and that it has special hardware requirements. There are three other levels of the interface that are less sophisticated than Windows Aero: Windows Classic, Basic, and Standard.



Figure 1-1. Using Flip 3D to flip through live previews of open windows

Security

Security has been enhanced at every level of the operating system, in both visible and invisible ways. Windows Defender protects against spyware, and the Windows Firewall now includes outbound as well as inbound protection. (By default, though, outbound protection is turned off.) Internet Explorer runs by default in Protected Mode, which protects the operating system from assault via the browser, and it includes a phishing filter. Windows Service Hardening stops background Windows services from being used by malware to damage the filesystem, Registry, or network to which the PC is connected. Windows Vista also gives network administrators more control over network and PC security, such as the ability to restrict access to removable storage devices such as Universal Serial Bus (USB) flash drives. Parental Controls allow parents to determine how their children can use the computer and what content they can access. BitLocker Drive Encryption, when used with compatible

hardware, locks down a hard disk so that it cannot be accessed if the computer is stolen. Windows Vista also includes User Account Control (UAC), which pops up warnings and asks for passwords when certain setup or customization screens or features are accessed. This enhances security, but it can also mean that you will have to type in a password or click an approval button before you can change certain system features.

Revised Internet Explorer

Internet Explorer, shown in Figure 1-2, has been given its most significant overhaul in years, with the addition of tabs, a redesigned menu system, increased security, Instant Search via an integrated search bar, page zoom, and better printing.

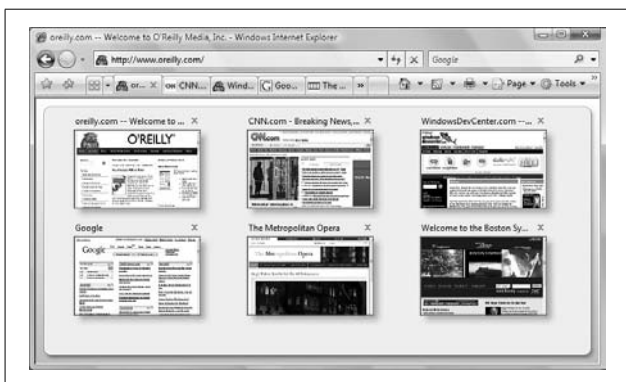


Figure 1-2. A revamped Internet Explorer, featuring tabs and a redesigned menu system

RSS support

Really Simple Syndication (RSS) allows for the delivery of live feeds of web content, news, and web logs. Internet Explorer includes a built-in RSS reader that lets you subscribe to and read RSS feeds.

Windows Sidebar and Gadgets

The new Windows Sidebar, shown in Figure 1-3, puts information and frequently used tasks directly on the desktop. Gadgets that live on the Sidebar perform tasks such as fetching RSS feeds, displaying system information, and showing up-to-date stock information.

Better search

Search speed has been significantly increased, integrated throughout the operating system, and enhanced with more ways to find files, programs, email, and web information. The Instant Search feature, in Windows Explorer and on the Search menu, finds information the instant you start typing. Instant Search is context-sensitive, so when a search is performed from within a folder, it will search that folder. A new Search Pane adds simple ways to fine-tune and filter searches. In addition, you can create Virtual Folders that are based on search criteria—for example, you can create a Virtual Folder that constantly updates itself and that will display all *.doc* files over a certain size, created after a certain date, and containing certain words.

New “Centers”

Windows Vista organizes common tasks and features into *Centers*, which contain all the information and settings related to the task or feature. For example, the Network and Sharing Center, shown in Figure 1-4, allows you to view information about your current network and connection, see a complete network map, connect to new networks, customize your connections, turn file sharing on or off, change security settings, and so on. Similarly, the Windows Mobility Center includes settings and information related to mobile computing. And the Backup and Restore Center makes it easy for you to back up and restore data as well as the current state of your computer.



Figure 1-3. The Windows Sidebar, which contains gadgets that perform a wide variety of tasks, as well as gather live information

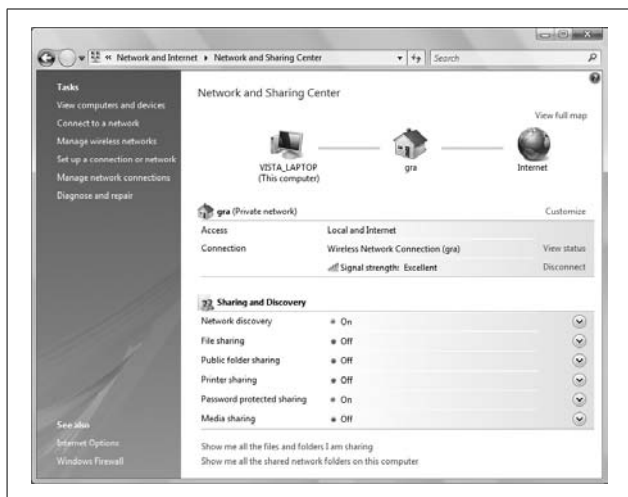


Figure 1-4. The Network and Sharing Center: command central for network information and configuration

New networking features

Collaboration tools make it easy for people to find others with whom to have live meetings over a network. Wireless networking includes support for the WPA2/802.11i security standards. Windows Vista also supports the new IPv6 Transmission Control Protocol/Internet Protocol (TCP/IP) architecture, which expands the number of available IP addresses.

Improved multimedia

Windows Media Center has been overhauled. If a PC has a TV tuner, it will be able to record, watch, and pause live television feeds. Browsing, searching for, and organizing digital media such as photos and music have been improved. See the upcoming “Windows Vista Editions” section of this chapter for details on which versions of Vista support these functions. In addition, Windows Media Player 11 features plenty of improvements.

Faster startup and resume

Whenever Windows Vista starts up, it has to run a variety of scripts and services, just as earlier versions of Windows had to do. But with Vista, startup doesn't wait for those scripts and services; instead, it moves ahead and starts, and the scripts run in the background, leading to faster startup. To make Windows Vista start even faster, you can put it into Sleep Mode rather than shutting it down. In Sleep Mode, all your open documents, windows, and programs are saved, but the computer shuts down most of its functions. When you wake it from Sleep Mode, the documents, windows, and programs are restored in exactly the state they were in when your computer went to sleep. Waking from Sleep Mode happens within seconds—faster than it takes for a computer to start up from a shutdown.

SuperFetch

This new technology can improve your PC's performance by watching the programs and data you often use, and then fetching them before you actually need them. That way, the programs and data load and run much faster when you open them. SuperFetch really comes into its own when combined with ReadyBoost, which allows your PC to use a high-speed flash drive for a SuperFetch cache. Flash drives are much less expensive than RAM, so this is an inexpensive way to boost your PC's performance. In addition, some systems, such as laptops, may have limited RAM capacity, so a flash drive is a way to boost those systems' performance.

Restart Manager

Under earlier versions of Windows, you frequently had to reboot your PC whenever you installed a patch to a program because Windows was unable to shut down all the processes associated with that program. With Windows Vista, you will have to reboot far less frequently when applying a patch because Restart Manager can

more effectively close down and restart the required processes. (Note that Restart Manager is not an application that you use directly; instead, it's a kind of internal plumbing that works without your intervention.)

Improved stability

Windows Vista includes a variety of new features under the hood to make it more reliable and less prone to crashes than previous versions of Windows. The Startup Repair Tool automatically fixes common startup problems, and all Windows services now have recovery policies that allow Vista to automatically restart a service that has crashed, as well as restart associated services.

Better backup

It's no secret that the backup programs built into Windows XP Home and Professional left much to be desired, and because of that, they were rarely used. Windows Vista's new backup program, Windows Backup, is actually useful and lets you back up to writable discs, USB flash drives, and other removable media, as well as across a network. Backups can be completely automated, and you can also back up an entire system image (what Windows Vista calls a *Complete PC backup*) that saves the current state of your PC so that it can be easily restored in the case of a system failure, or if your PC is stolen. There's also a Backup and Restore Center, shown in Figure 1-5, which provides a central location for all backup and restoration chores.

Windows Vista Editions

Those who were slightly confused by the two different versions of Windows XP—the Home Edition and the Professional Edition—will be flummoxed by the dizzying array of different Windows Vista versions. There are five different core Vista versions, for everyone from users with bare-bones PCs, to home users interested in multimedia, to users who work in