Thinking Person's Complete Guide to Mac OS X

# Learn OS X Lion

SECOND EDITION

Scott Meyers | Mike Lee

Apress®

# Learn OS X Lion

Scott Meyers and Mike Lee

Apress®

Learn OS X Lion

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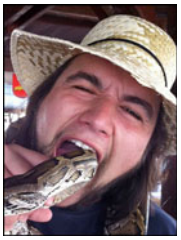

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Scott Meyers

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Mike Lee

# Introduction

If you're new to the Mac or just new to Lion, this book is for you . . .

Wait, I didn't say new to computers!

That's where this book differs from many others. This book assumes that you have used computers before—maybe not a Mac and probably not Lion—but you have some experience with what a computer is and how to use it. With that understanding, this book can talk to you, without talking *down* to you.

*Learn OS X Lion* is divided into nine sections to help you not only get up to speed using OS X Lion, but also delve into Lion's nooks and crannies so you can get the most out of it.

Part 1 begins by providing you with a quick tour of OS X Lion, describing unique features of the operating system and how to take advantage of them.

Part 2 then builds on the first section to show you how applications generally behave with OS X Lion, and how to work with documents. This includes a discussion of common applications that are included with OS X.

Part 3 provides information about connecting to the Internet and how to use Safari, Mail, and other Internet applications included with Mac OS X Lion.

Part 4 provides a quick introduction to the iLife application suite, including iPhoto, iMovie, and GarageBand. While not specifically included with OS X, these apps are included with every new Mac.

Part 5 starts our move away from the basics to look at a wide range of administration tasks in OS X. Here we provide a tour of the System Preferences, as well as important information on backups, security, and disk maintenance.

Part 6 provides a solid introduction to OS X's command-line environment and Darwin subsystem.

Part 7 shows how to take advantage of the advanced networking features of Mac OS X, including sharing resources and joining corporate networks.

Part 8 provides solutions to working with non-Apple environments from your Mac.

Part 9 concludes by providing an introduction to workflow automation and development on and for OS X.

By the time you finish this book, you should not only have a solid understanding of how to use and maintain your Lion, but you should be well poised to continue into a wide range of computing topics including networking and development if you so choose.

Part

# Introducing Mac OS X 10.7 Lion

In part I of Learn Mac OS X 10.7 we have three primary goals: Provide an overview of Lion's interface including essential interface components and applications such as the Finder, the Desktop, the menu bar and the Dock. Provide the big picture of how Mac OS X is organized, where files and applications are stored, and the purpose of essential files and folders found in Mac OS X. Give a quick look at a few tools and features that are backed into Lion to help you be as productive as possible.

Chapter 1

# Welcome to Lion

Our journey to learning all the ins and outs of Mac OS X 10.7 (a.k.a. "Lion") begins now. To begin with, this chapter is going to cover a large swath of fundamentals that you will need to get the most out of Mac OS X. This includes:

- An introduction to the Aqua interface and common elements in Mac OS X
- A look at the menu bar and the Dock
- Using the Launchpad

> **NOTE:** If you are upgrading from a previous version of Mac OS X, or for whatever reason you need to reinstall Lion on your Mac, you may want to quickly take a detour to Appendix A for a look at installing and setting up Lion.

## The Aqua Interface and the Desktop

The overall interface (Figure 1–1) of Mac OS X is referred to as "Aqua." Apple defines Aqua (with a Capital "A") as "The graphical user interface and visual theme of Mac OS X." If you have been a longtime Mac user you may have noticed that Aqua has evolved with each major release of Mac OS X. Elements have been refined, often sleeker, sometimes darker, but still recognizable from version to version. This evolution has continued with Lion.

Aqua is defined by a number of common elements: windows, toolbars, icons, files, folders, and the desktop. Aqua elements, combined with the Finder, the menu bar, and the Dock provide the key pieces for using your Mac computer.

**NOTE:** The Finder is the primary application in Lion that allows you to move around and work in Mac OS X. The application is automatically launched when OS X starts and generally remains running. We will cover the Finder in depth in Chapter 2.

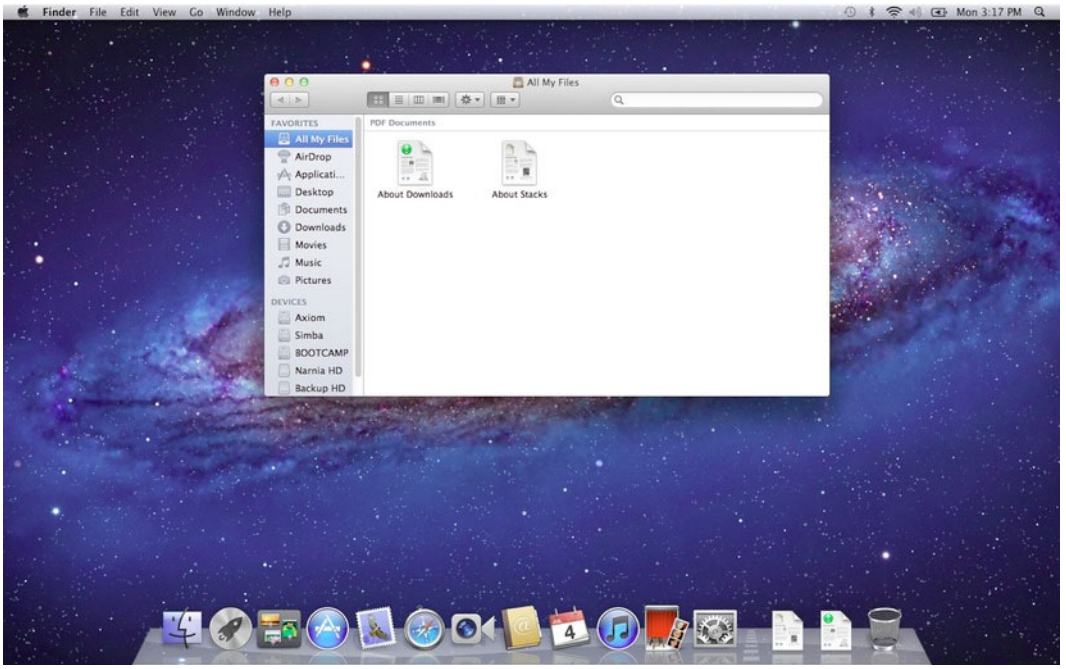


**Figure 1–1.** *A screenshot of Mac OS X Lion showing the menu bar (at the top), the Dock (at the bottom), a Finder window (in the foreground), and the desktop in the background. Folders, files, and various other icons, as well as the Finder's toolbar and window, are all Aqua elements.*

As you move along in the book you will be introduced to many specific interface elements and shown what purpose they serve. You will also learn that while there is a lot of variability in the interface from application to application, and even from computer to computer (Mac OS X offers a great deal of personal customization), Aqua is designed in such a way that amidst all the differences, things pretty much work consistently.

Before you move on to the rest of the book there are a few general interface elements that are worth taking a look at beginning with the desktop.

## The Desktop

The desktop metaphor has existed in Mac OS since the very first Macintosh computers hit the market more than 25 years ago (the first Macintosh computer was introduced to the press in October of 1983, though its noted public introduction occurred on January 22, 1984 with the famous, perhaps somewhat ironic, Super Bowl advertisement. The desktop in Mac OS X refers to the background area on the screen

(see the background in Figure 1–1). By default the desktop is empty (except for the desktop wallpaper) until you plug in (or insert) an external disk, CD, or DVD that will then show up as an icon on the desktop. That said, many people use the desktop to place files or folders just like one would on the actual surface of one's desk or table.

The desktop is technically an extension of the Finder with some unique twists; as such you will learn more about the desktop later in this chapter.

> **NOTE:** A number of the Personal System Preferences as well as some of the Finder Preferences have a direct effect on the desktop's appearance and behavior. The Finder Preferences are covered later in this chapter. All of the System Preferences are covered in Chapter 18.

## Windows

Windows (not to be confused with Microsoft Windows) are basic elements that "float above" the desktop and generally contain either a document, an application, or occasionally views of other files folders, and applications. According to Apple interface documentation, all windows must at least contain a functional close button in its title bar. This little tidbit separates windows from dialogs. Figure 1–2 shows a typical document style window with common window elements including the window control buttons, title, versions button, full screen toggle button, and a scrollbar.

The window title bar resides at the top of every window (with a few notable exceptions where applications work outside the normal UI guidelines). Usually, at a minimum the window title bar will contain the window control buttons and the window title. The version button and full-screen toggle button are both new in Lion and will appear when supported. One other important window element shown in Figure 1–2 are the scrollbars that allow you to scroll through a document when its size exceeds the window view area.

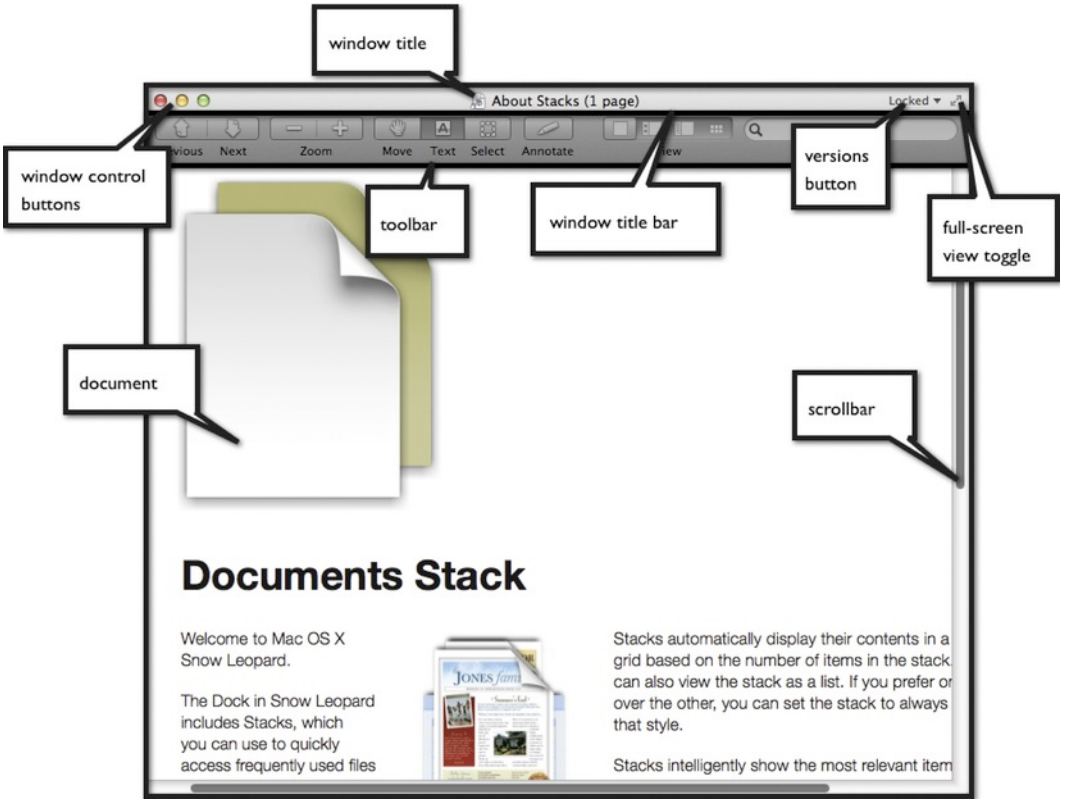


**Figure 1–2.** *A typical document window showing common window elements*

### WHY DOES EVERYTHING SEEM TO BE SCROLLING BACKWARD?

In Lion, Apple, by default, made scrolling behave similar to swiping on iOS. This effectively reverses the direction of scrolling. Now down is up and up is down (or was it that way, and now up is up and down is down?) No matter how you look at it, coming from older versions of Mac OS X, or any other computer OS, everything seems backward. Now you could continue to work like this, and after three to seven days you might totally accept this and everything else will suddenly seem backward, or you can go to the mouse or trackpad system preference (covered in Chapter 18) and unselect the "When using gestures to scroll or navigate, move content in the direction of finger movement" option at the very top of the preference pane. If you decide to change this back (for opposite day, to just mess with a friend or co-worker, or when Apple releases a touchscreen Mac where this would make more sense) just reselect the option.

## The Window Control Buttons

Each of the window control buttons has a specific function. The left-most window control button (denoted by an "X" when you hover over it) closes the window (but does not necessarily quit the application). The middle window control button denoted by the minus sign (-) is the minimize button. The minimize button will send the window to the

dock, and depending on your dock preferences this will either create a separate window icon on the right side of the dock (just to the left of the trash), or it will minimize the window into the application icon. To reactivate a minimized window, click on the dock icon representing the window; or, if the "minimize windows into application icon" preference is selected, click on the application icon in the dock to reactivate all minimized windows belonging to that application. The right-most window control button, denoted by the plus sign (+) when hovered over, is the zoom button. This will toggle the window size between a maximized size and the current size.

**NOTE:** Some applications, particularly certain noted Apple applications (i.e., iTunes), don't exactly follow these rules. In fact, iTunes doesn't have a proper window title bar at all. In moments like this feel free to join one of two camps of people: those who curse Apple for dictating specific rules and then breaking them (most developers fall into this group) or those who marvel at Apple's skill at breaking the mold and building new inventive interface paradigms (caused by excessive exposure to reality distortion fields emanating from Cupertino). Picking a side can be fun. Most people, however, just learn to accept these little things.

## The Versions Button

Versions is a new feature introduced in Lion that will work behind the scenes to keep track of previous version of documents. The Versions button on the window title bar will only appear on the document windows of applications that support this new feature. We will explore Versions in more depth in Chapter 5.

## The Full-screen Toggle

The ability to run full-screen applications is another new feature introduced in Lion. For applications that support this feature, the full-screen toggle will expand the window to full-screen mode. To toggle out of full-screen mode, hover the mouse pointer at the top of the screen until the menu bar appears and select the full-screen toggle button that appears on the far right of the menu bar.

**TIP:** One notable control that is missing from many windows in Lion is the resize control that once appeared in the lower-right-hand corner of most windows allowing you to alter the size of a window. In Lion you can resize any window by clicking on the edge of any window. Upon clicking on the edge of a window, your mouse pointer should change into a small icon with two arrow heads indicating the direction that you can resize your window. Clicking different edges (and on the corners) will allow you to resize your window much more effectively than in the past.

### A THIRD TYPE OF WINDOW

When we talk about windows here we are generally talking about application and document windows. In common Apple terminology there is a third type of window that Apple describes as "windows that contain controls and options that affect the active document or selection." Examples of such windows include: floating pallets and toolbars, Inspector and option windows, and Apple's Fonts window. While from a user perspective these are simply special windows, from a developer perspective these are called panels. When looking at these things from the user perspective we will continue to use the term window in describing these (as long as there is a close button in the menu bar). If we are looking at these from the developer perspective we will refer to these as panels. In user space, panels without close buttons are referred to as dialogs.

## Dialogs

Another common window-like element that is common in Mac OS X is the dialog. A dialog is a special pop-up element that prompts you for additional information. Upon selecting the proper information the box will automatically close. Common dialogs that you will encounter include print dialogs and the shutdown dialog (shown in Figure 1–3).

**Figure 1–3.** *A dialog, such as the shutdown dialog shown here, is a standard way that Mac OS X prompts you for additional information before proceeding with a task.*

## Shortcut Menus

One final reoccurring element to touch on up front is shortcut menus (otherwise referred to as contextual menus). Shortcut menus are menus that pop up when you control-click on many other elements in Mac OS X. These shortcut menus (Figure 1–4) provide shortcuts to many common options, and we will take advantage of these throughout the book.

**Figure 1–4.** *Shortcut menus, such as the desktop shortcut menu shown here, provide an easy way to access common context-aware options in Mac OS X.*

> **NOTE:** Control-click (i.e., hold the Control key and click the mouse) is generally synonymous with the right-click on a two button mouse (Mouse Click 2) or a two-finger click on the trackpad. While control-click may seem a bit of an anachronism with most computer mice available today offering at least two mouse buttons (real or simulated), as opposed to the days when Macs only had one mouse button, we will be using the term throughout the book.

Now that we have had a quick look at some essential reoccurring interface elements, let's take a look at a few specific interface elements beginning with the menu bar.

# The Menu Bar

As we take a look at the Finder, we often reference the Finder's application menu that resides in Mac OS X's menu bar. The menu bar (Figure 1–5) is one of the most important user interface elements in Mac OS X (and has been since the very first Macintosh OS). The menu bar is arranged into three areas: the Apple menu, application menus, and status menus. We will look at each of these one at a time.

**Figure 1–5.** *The menu bar is an essential element of Mac OS X.*

## The Apple (🍎) Menu

The Apple menu, on the far-left side of the menu bar (shown expanded in Figure 1–6), is a special menu containing a number of system-level commands and resources that are particularly handy to have easily accessible. These include the About This Mac command; links to Mac OS X's Software Update; the Mac App Store; System Preferences; Dock preferences; the Recent Items command (including shortcuts for applications, documents, and servers); the Force Quit; the Sleep, Restart, and Shutdown commands; and the Log Out *User* command. Most of these are fairly obvious as to what they do; however, some additional information about some of these items may be helpful.

**Figure 1–6.** *The Apple menu on the menu bar provides access to a number of system commands.*

The About This Mac command opens a window (shown in Figure 1–7) that gives you some basic information about your computer. Clicking the light gray text under the large Mac OS X that reads Version 10.7 will cycle through additional information, including the exact operating system build number and the computer's serial number (this is a much easier way to get your serial number than searching around for it on your actual computer).

**Figure 1–7.** *About This Mac window in Lion*

The More Info… button in the About This Mac window will launch the new System Information application (which replaces the System Profiler) along with a new enhanced

About This Mac information window (Figure 1–8). The System Information application's About This Mac view provides useful information about both your Mac hardware and software ranging from detailed information about connected storage devices (and what kind of data is stored on them) to links to support and warranty information about your specific Mac.

**Figure 1–8.** *The enhanced About This Mac information window is part of the new System Information application (which replaces the System Profile application in Lion).*

The Recent Items command opens a sub-menu that by default shows you the last ten applications, documents, and servers you accessed. You can adjust these defaults in the Appearance panel in System Preferences. You'll also see an option here to clear all items if for whatever reason you don't want that information to display.

The Force Quit command opens a new window that shows all the currently running Mac OS X applications. From this window you can select any of those applications to quit immediately. By immediately, we mean right away—no saving files or anything. The application will just quit. About the only time you may find yourself needing this is if an application freezes up (or in Apple lingo "stops responding") or if you need to "relaunch" the Finder.

> **TIP:** You can also Force Quit any item from the dock by Control-Option-Clicking on the desired item in the dock and selecting "Force Quit" from the shortcut menu (If you apply this to the Finder instead of Force Quit you will see "Relaunch"). One other option, if all else fails: holding down Command-Option-Shift-Escape for a few seconds will force quit the foreground application.