How Can I Get the Most Out of the Finder?



time working with the Finder, the iMac Desktop where you organize al files. In this chapter, you learn how to make the Finder work in a way best for you, with hidden Dock features, special folders that do some o work for you; combinations of windows and programs that you can a anytime with a click; and more. Using Specialized Folders Bending the Dock to Your Will Setting Up Custom Workspaces..... Automating Repetitive Tasks

Using Different Window Modes

With two window modes and four different view options, your iMac has plenty of ways to show you the contents of your hard drive and any other drive you have mounted. Which combination you should use at any given time depends on what you're looking at and what you want to do with it.

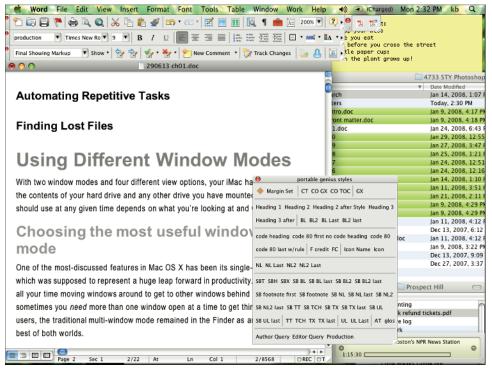
Choosing the most useful window and view mode

One of the most-discussed features in Mac OS X has been its single-window mode (see figure 1.1), which was supposed to represent a huge leap forward in productivity. No longer would you spend all your time moving windows around to get to other windows behind them. But it turns out that sometimes you *need* more than one window open at a time to get things done. Fortunately for iMac users, the traditional multi-window mode remained in the Finder as an option. So now you have the best of both worlds.



1.1 Single-window mode gets you the sidebar, the toolbar, and, it's true, less screen clutter.

In the Finder's traditional multi-window mode, double-clicking a folder spawns a new window so that you can see both the original folder's contents and the new one's contents at the same time. If you keep double-clicking down through the folder hierarchy, you can end up with dozens of windows covering your desktop (see figure 1.2). In single-window mode, by contrast, when you double-click on a folder shown in a window, it takes over that window to display its contents. You only end up with another, separate window if you consciously create one with the New Window command (%+N); then you need to navigate to the folder you want to view in the new window.



1.2 This situation is what single-window mode was intended to prevent.

When you're flipping through a series of folders to find something, you're best off in single-window mode. The Finder's Go menu helps you move quickly to different locations on your computer without having to travel through all the intervening folders. On the other hand, when you're moving files around on your iMac, multi-window mode is your friend, especially if you have lots of screen real estate on which to scatter windows around.



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To see a menu of the folders containing the folder you're looking at, $\Re+\text{click}$ the window's title bar. Choose any folder in the list to back out to that point in the hierarchy. Even in single-window mode, a new window opens to display the contents of the folder you chose, as long as you keep pressing the \Re key when you choose a folder name.

Single-window and multi-window modes can display files in four ways:

- Icon view. Use this option if the file stands out visually or if you only have a couple of files in a folder and want a bigger target for double-clicking.
- **List view.** If you need to find something by name or date or other attribute, use List view. You can click and drag column headers to reorder the columns, click a column header to sort by that attribute, and drag the right edge of a column header to change that column's width. To control which columns are displayed, choose View Show View Options.
- Column view. Particularly useful if you have similarly named files that are distinguished by their locations, Column view lets you see the folder hierarchy in a logical way so you can tell what's inside what. Double-click the column sizer at the bottom of a column (it looks like a vertical = sign) to resize the column's width to fit its contents, and Option+double-click any column sizer in a window to resize all the columns in the window to the same width, based on the widest item shown in the window.
- Cover Flow view. This view is an import from iTunes, and it's great if you're a visual thinker. You can flip through files the same way you flip through CDs on a jukebox.



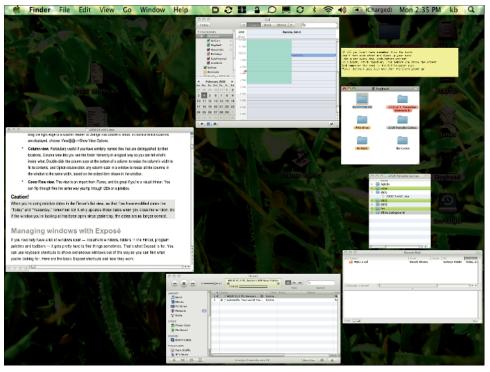
Caution

When you're using relative dates in the Finder's List view, so that files have modified dates like "Today" and "Yesterday," remember that OS X only updates those dates when you close the window. So if the window you're looking at has been open since yesterday, the dates are no longer correct.

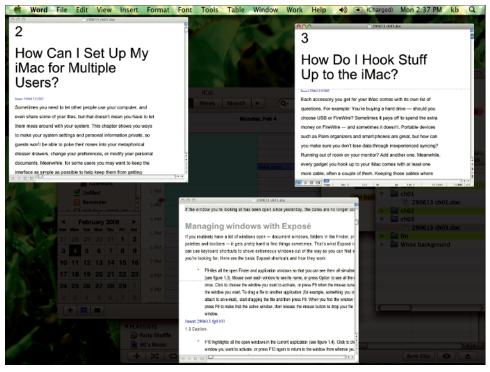
Managing windows with Exposé

If you routinely have a lot of windows open — document windows, folders in the Finder, program palettes, and toolbars — it gets pretty hard to find things sometimes. That's what Exposé is for. You can use keyboard shortcuts to shove extraneous windows out of the way so you can find what you're looking for. Here are the basic Exposé shortcuts and how they work:

● F9. Tiles all the open Finder and application windows so that you can see them all simultaneously (see figure 1.3). Mouse over each window to see its name, or press Option to see all the names at once. Click to choose the window you want to activate, or press F9 when the mouse cursor is over the window you want. To drag a file to another application (for example, something you want to attach to an e-mail), start dragging the file and then press F9. When you find the window you want, press F9 to make that the active window, and then release the mouse button to drop your file into the window.



- 1.3 See all the open Finder and program windows by pressing F9.
 - F10. Highlights all the open windows in the current application (see figure 1.4). Click to choose the window you want to activate, or press F10 again to return to the window from which you came. If you want to copy content from one window to another in the same program, select the content and start dragging it, and then press F10. Find the window you're looking for, press F10 again to activate it, and drag and drop the content to the correct location.



- 1.4 See all the windows belonging to the frontmost program by pressing F10.
 - F11. Shows the desktop, shifting open windows in the Finder and all applications off to the sides of your screen. If you want to drag an item to the desktop, start dragging, and then press F11 without releasing the mouse button to reveal the desktop. Press F11 to restore the windows to their previous locations.



Note

You can see the Exposé animations in slow motion by pressing Shift as you press the appropriate Exposé function key. While this feature isn't particularly useful, it's definitely pretty neat.

Customizing the toolbar

The buttons shown in the Finder single-window mode's toolbar are the ones Apple thinks you'll use most often. Sometimes, however, Apple is wrong. Fortunately, you can modify the toolbar to include the buttons you really want and leave off the ones you don't. To make quick changes, press \Re and drag a button off the toolbar to delete it or to a new location to move it. For a major overhaul, follow these steps:

In the Finder, open a Finder window and choose View

Customize Toolbar (see figure 1.5).



- 1.5 Make the toolbar work the way you want it to, not the way Apple thinks it should.
 - 2. Drag any buttons you don't want off the toolbar. They disappear in a puff of smoke.
 - 3. From the selection of buttons, drag any buttons you want to add to the toolbar. You can add buttons wherever you want, and you can add as many as you want. If you add a duplicate of a button that's already on the toolbar, the original button disappears so that there is only one copy.
 - **4. Drag and drop to rearrange the buttons' order on the toolbar.** Use the Space, Flexible Space, and Separator options to control the exact arrangement of buttons.
 - 5. If you decide to revert to the original toolbar, drag the default set of buttons onto the toolbar.
 - 6. Click Done.



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By default, toolbar buttons show only icons, with no text labels. If you have trouble remembering which button does what, change the Show menu setting at the bottom of the Customization dialog to Icon & Text. Or, to see each Show option in action, press \Re and click the oval button in the upper right-hand corner of the window repeatedly to cycle through the six possible settings.

Customizing the sidebar

Finder windows in single-window mode feature an area at the left called the sidebar (see figure 1.6). Here you find locations you're likely to visit frequently, neatly categorized into Devices, Shared, Places, and Search For sections. If you don't visit some of these locations, feel free to click and drag them right out of the sidebar, or at least to the bottom of the list; you can arrange them in any order you want except for the items in the Shared section. You don't need to press a special key to do this; the sidebar is always open for editing.

Adding a file, folder, or program to the sidebar is just as easy; track it down, make sure you're in single-window mode (click the clear oval button at the top-right corner of the window to switch from multi-window mode), and drop the new item into the Places section. I use this



1.6 The sidebar provides convenient access to locations you often access from the Finder.

feature to keep the folders for my current freelance jobs at my fingertips, and some of them have rather long names, so I widen the sidebar by clicking and dragging its right edge.

Here's what you'll find in each section of the sidebar:

- Devices. In this section, you see your computer and each hard drive, thumb drive, or camera attached to your computer, including your iDisk.
- Shared. Here you find shared computers on your local network.
- Places. This section starts out containing your home folder and some of the folders inside your home folder, but you can add whatever you want here: files, folders, programs, Web bookmarks, whatever tickles your fancy.
- Search For. A few smart folders (saved searches, explained later in this chapter) are already set up for you, and this is where you can access them. Three show documents that have been modified today, yesterday, or in the past week, and three display different kinds of documents

You can easily specify which categories of items appear in the sidebar. In the Finder, choose Finder ⇔ Preferences and click the Sidebar tab. If you don't want your iPod showing up in the sidebar every time you plug it in, for example, uncheck the box next to CDs, DVDs, and iPods.

Viewing full-screen file previews

The latest release of Mac OS X, called Leopard, introduced a way to see the contents of files in the Finder without having to open them. It's called Quick Look, and it's invoked by clicking a file and pressing the spacebar. A window pops up, displaying the contents of the file along with controls for viewing the file full-screen, playing it (if applicable), scrolling through its pages if it has them, and closing the Quick Look window (see figure 1.7).



1.7 To see the contents of this PDF file, you don't have to open it; just take a Quick Look by pressing the spacebar.

Quick Look works with a surprising range of document types. Of course, it's great for peeking into image files and PDF documents, but it can also display an Excel spreadsheet, a Word document, or a movie — and the movie plays while you're looking at it. If you activate Quick Look with multiple

documents selected, you can use the arrow keys to view each document in turn, and you can see the thumbnails of all of the files in a grid by clicking the Index Sheet button next to the Full Screen button at the bottom of the Quick Look window.

To close the Quick Look window, press the spacebar again. You don't have to close it when you finish looking at one document, however; you can keep the window open and it displays whatever document you click on as you move around the Finder. If you need to zoom in on the document you're viewing, no problem; Option+click anywhere in the preview image to zoom in once and repeatedly to continue zooming in. Shift+Option-clicking zooms you right back out again in the same increments. When you're zoomed in, you can click and drag the picture around within the window.

Using Specialized Folders

For the most part, the folders that you create in the Finder are simply containers for files and other folders. But you can make your folders do more for you. Smart folders perform the kind of function that computers were supposed to be doing for us all along. Instead of you keeping track of which files belong in which folder, your iMac can do the work for you. All you do is tell the system how you want it to choose files to put in the folder, and then whenever you open that folder the right files are automatically there. Burn folders are a little different. A burn folder serves as a catch-all for the files you want to burn to disc. Drop files in there and choose File \Rightarrow Burn to Disc whenever you're ready, and then delete the whole folder or just its contents without ever touching the original files. Burn folders use aliases to copy the right files onto your disc while leaving the originals in place. And any folder, including a smart folder or a burn folder, can have actions attached to it, so that it will automatically do its assigned job whenever the trigger event you've specified occurs.

Creating smart folders

When you need a folder to contain a constantly changing set of documents, follow these steps to make a smart folder do it for you:

- 1. Choose File ⇒ New Smart Folder, or press #+Option+N.
- 2. Choose the criteria for the smart folder (see figure 1.8):
 - Type keywords related to the subject or project in question. For example, to locate
 files related to this book, I might make a smart folder based on the keywords "iMac" and
 "genius."
 - Choose This Mac, Servers, or your home folder to specify where you want to look for files. This Mac includes files anywhere on your computer; Servers includes files located on other computers on your network.

- Choose Contents or File Name. Contents is the default choice, and it allows the smart
 folder to include any file that mentions the keywords anywhere within the file; if you
 choose File Name, the keywords must be part of a document's name for that file to be
 included in the folder.
- 3. Click the plus button to add additional criteria, such as a date range or a label color.



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If you find yourself choosing Other from the search attribute menu all the time so you can specify a particular criterion, select the check box next to its name to add it to the menu. Then you won't have to go looking for it the next time you need it.



- **1.8** This smart folder collects files containing the word "greyhound" that are located anywhere on my iMac.
 - 4. Click Save, and then choose a location and enter a name for the new folder. The Finder always defaults to the Saved Searches folder, which is where smart folders need to be in order to appear in the sidebar under Search For, but you can put your smart folders wherever you want them.



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To assign searchable keywords to a file without actually inserting them in the document, select the file, choose File □ Get Info, and type the keywords in the Spotlight Comments field at the very top of the Info window.

Making burn folders

Using a burn folder is a good way to collect files you want to burn to disc while you're working, before you're ready to actually insert the disc and burn it. You might use a burn feature for a periodic backup by dragging documents or folders into it over the course of a day, and then burning a disc from it just before you quit work for the day.

To create a burn folder, choose File Description New Burn Folder. By default, the folder is named "Burn Folder," but you can change the name to whatever you want. Drag files and folders to the burn folder, which is created on the desktop (although you can move it wherever you want). When you're done, open the folder, double-check the contents, and click Burn. A confirmation dialog appears; insert a blank CD or DVD and click Burn again. Your iMac burns the disc, verifies it by comparing the disc to the original data, and mounts the disc on your desktop.

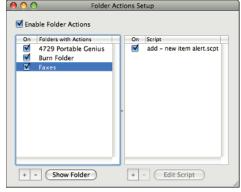


Only the top-level folders that you see in a burn folder's window are aliases and can be deleted with impunity; if you double-click one of these folders, you're actually opening the real folder. So be careful!

Attaching automated actions to folders

Folder actions are another way to make your iMac do some of the grunt work so you can spend your own valuable time on more creative endeavors. Essentially, they're scripts attached to folders; when the right trigger takes place, such as files being added to a folder, the script activates. You can use folder actions to do things like convert all the images you drop into a particular folder to JPEG format, move documents to more appropriate locations based on their file types, or notify you whenever new files are dropped into your Public folder.

The Finder comes with a few scripts that are ready to attach to your folders. To access them, first Ctrl+click a folder icon and choose More ♣ Enable Folder Actions. Then Ctrl+click the folder and choose More ♣ Configure Folder Actions. First, choose a folder to automate by clicking the plus button on the left side of the Folder Actions Setup dialog and then navigating to the folder you want to use, then attach an action to it (see figure 1.9).



1.9 This folder action lets me know any time a new file is added to my Faxes folder.

You can use folder actions to notify you whenever you receive a fax with your iMac's fax modem. First, open the Folder Actions Setup dialog (Ctrl+click and choose More Configure Folder Options). Choose the folder where the faxes you receive are saved (by default, this is the Faxes folder within the Shared folder) and click Open. When you see the Choose A Script dialog, click "add - new item alert.scpt" and click Attach, and then close Folder Actions Setup. An alert dialog appears every time a fax is received and saved in that folder.



Note

You can attach more than one action to a folder; just choose the folder in the Folder Actions Setup dialog and click the plus button under the Script pane to add an additional action.

Bending the Dock to Your Will

Every iMac user has a different idea of what the Dock should do and how it should do it. I prefer to use my Dock as a process dock, with icons only for currently running programs. You, on the other hand, may prefer to stick anything and everything into the Dock: programs, folders, documents, URLs, the works. The nice thing about the Dock is that it works both ways, and you can use it as little or as much as you prefer. The following sections show you a few ways to work with the Dock that you may not have known about before.

Accessing hidden Dock features

The Dock can do a lot of things that aren't immediately apparent from looking at it. Some of the Dock's coolest features, in fact, are not normally accessible, but you can invoke them using a free utility called TinkerTool (Marcel Bresink Software-Systeme, http://bresink.com/osx/TinkerTool.html). Here's a list of TinkerTool's Dock-related features:

- Disable the three-dimensional glass effect of the Leopard Dock
- Add a shadow to the Dock
- Add hidden and system files in the Dock's contextual menus
- Lock the Dock so that its size can't be changed
- Lock the Dock so that its contents can't be changed
- Put the Dock at the top of the screen
- Put the Dock at the beginning or end of any screen border
- Change the animation used when you minimize a window into the Dock

TinkerTool can also do dozens of things that have nothing to do with the Dock. Check out the Web site for more information.

Meanwhile, if you want to master the Dock, there's a lot to learn. For example, did you know that if no Finder windows are open, you can open a new Finder window by clicking the Finder icon in the Dock, which always appears at the Dock's left-hand end? Read on for more Dock secrets.

Driving the Dock with keyboard shortcuts

Forget Coke versus Pepsi and Mac versus Windows — the real battle of the millennium is mouse versus keyboard. Those who've forsaken their mice and learned all the keyboard shortcuts their brains can hold will swear up and down that keyboarding is always faster than mousing. Others cite Apple research conducted in the 1980s that concluded that keyboard users only *think* they're working faster by forsaking the mouse. So I'm staying out of this argument — but I will say that I'm a big keyboard-shortcut user myself. It just *feels* faster...

Apple doesn't talk much about this fact in its marketing materials, but it just so happens that most of the Mac OS X interface can be navigated entirely via the keyboard, including the Dock. Give this a try: Press Ctrl+F3, and then use the arrow keys to move back and forth across the Dock. When you get to the program you want to use, press Enter to switch to it. If you use the Dock's Hiding feature, press Ctrl+F3 again to hide the Dock. Here are a few other useful keyboard shortcuts to use with the Dock:

- \mathbb{H}+Option+drag a file onto a Dock icon to force the file to open in that program.
- To hide all applications except the one you're clicking, #+Option+click the chosen application's icon in the Dock.
- When you're using a program's Dock menu, press Option to change the Quit command to Force Quit.
- To reveal a Dock item's location in the Finder, 第+click on its Dock icon.
- If you %+drag an icon from the Dock, you'll move the icon's original file to the new location.
- Shift+drag the Dock divider to place the Dock on the left, bottom, or right side of your screen
- To restrict the Dock to its best-looking sizes as you resize it, press Option as you drag the Dock separator.
- To temporarily toggle Dock magnification on or off, press Control+Shift.

Sending text to other programs via the Dock

Copy and paste is convenient, but sometimes drag and drop is even more so. The Dock can provide a pathway for you to move text from one program to another with minimal hassle. All you have to do is select the text, drag it to a Dock icon, and release the mouse button to drop the text into that program. Table 1.1 shows what happens in several programs when you try this neat little trick.

Table 1.1 How Programs Handle Dragged Text

Dock Icon	What You Drag	What It Does
Safari	URL	Opens the Web page
	Text	Performs a Google search using the text as the search terms
TextEdit	Text	Creates a new document containing the selected text
Mail	Text	Creates a new mail message containing the selected text
Stickies	Text	Creates a new sticky note containing the selected text



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If you're having trouble dragging text out of a Safari window, slow down a little bit — literally. Click and drag to select the text, then click on the selection and hold the mouse button down for a second before you start dragging.

Making the Dock better with third-party software

These indispensable Dock add-ons can bring your Dock to a whole new level, whether you want to add features or just change the way the Dock looks (see figure 1.10). And half of them are free — how's that for a deal?



1.10 Grab some Dock-flavored eye candy for yourself with DockChanger.

Gaining single-click access to system functions

How would you like to take a screen shot, empty the Trash, or restart your iMac with a single click? Dockables (Free, COCOAapp, getdockables.com) makes all those possible, along with a slew of other common tasks such as muting the sound and opening your screen saver. It's a set of tiny applications that you can keep in a folder in your Applications folder and then add to the Dock one at a time or *en masse*. The apps even come with three different sets of icons, so you can use the ones that you think are best looking.

Adding application status info to Dock icons

When you glance at iChat's Dock icon, it tells you how many unread messages you have. Wouldn't it be nice if other programs put useful information in their Dock icons, too? Docktopus (\$20, Startly Technologies, docktopus.com) makes it so by enabling you to add what the developer calls badges to Dock icons. You're limited to nine types of badges, some of which are more useful than others. In my opinion, though, the Mail Peek badge alone is worth the price of the package; it tells you how many unread messages you have in specified e-mail accounts. Mail does this all by itself — but if you use another e-mail program, you need Docktopus to gain this feature.

Putting Tiger-style hierarchical menus in your Leopard dock

When Mac OS X 10.5 (Leopard) came out, Apple thought users would love its new Stacks feature. Stacks, of course, are an attractive way to view the contents of folders from the Dock, but they can't do one thing that you *could* do with folders in the Dock before: display folder hierarchies. HierarchicalDock (Free, Eternal Storms Software, eternalstorms.at/utilities/hierdock/) brings that capability back to Leopard so that you can click a folder in the Dock, move up the list of its contents to another folder's name, and move to the side to choose a file from among the contents of the second folder. It's a small feature, but a nice one.

Customizing the Dock's appearance with themes

Apple keeps futzing around with the Dock's appearance; it used to be a simple, translucent pane, and now it's a bright, shiny shelf. If that doesn't suit you, though, you can futz around with the Dock's appearance all by yourself, and with much more interesting options. To get an idea of how your Dock could look (Crumpled pirate map? Black leather? Chain link fence?), head over to LeopardDocks.com and take a look at the site's downloadable Dock themes. Then download DockChanger (\$10, Whimsplucky Software, whimsplucky.com), so that you, too, can put these gorgeous themes into action on your iMac. Whimsplucky produces a new set of themes every month, and the program's devotees are creating more all the time, so you can have a different Dock every single day if you're so inclined.

Inserting additional separators

It's hard to imagine that you would ever want to download an application that does precisely nothing, but that's exactly what you get when you download iPassion Dock Separators (Free, ipassion.it/dock-separators-support/). In fact, you get quite a few applications that do nothing, each with a different attractive icon that makes a great separator for your Dock. Use these tiny graphics to organize your Dock by grouping its icons into categories that make sense to you. You can even add labels under the separators to indicate what's what.



If you're running Mac OS X 10.5.2, you'll be able to choose View Contents as List from a Dock folder's contextual menu. That's still not quite as simple as the way folders worked pre-Leopard, however, so HierarchicalDock remains one of my favorite utilities.

Trying a Dock alternative: DragThing

Whether you like the Dock or loathe it, you can't deny that it doesn't do everything. And that's okay. For those who want a different Dock, there are all kinds of alternative application launchers out there. My favorite is DragThing (\$29,TLA Systems, dragthing.com). You can use DragThing to set up multiple docks, each with its own custom appearance, and use keyboard shortcuts to open Dock items and control DragThing in other ways. It can use sounds to give you audible feedback so you know when you've done something, and you can use it to store pictures and text clippings that you can paste into documents with a single click. Use it instead of the Dock or alongside the Dock, whichever you prefer.

Setting Up Custom Workspaces

Spaces, introduced with the Leopard release of Mac OS X, are Apple's implementation of a concept called virtual desktops that's been around for decades. Using Spaces, you can clear your Desktop instantly in the middle of a project and start a whole new project, with different applications and open folders. Then you can switch back and forth between the two (or more) instantaneously. The advantage is that you don't have to deal with the clutter caused by having all your open windows and programs visible all the time.

You can turn on and configure Spaces by choosing Apple menu ♣ System Preferences and clicking Exposé & Spaces, then the Spaces tab (see figure 1.11).

Select both check boxes at the top of the tab, which enables Spaces and adds a Spaces menu to your menu bar. You may end up removing the Spaces menu later — just \Re +drag it off the menu bar to do that — but I find that it's the easiest way to navigate from one space to another when you're just getting used to Spaces. Now, decide how many spaces you want to start with and adjust the Row and Columns settings to create that many spaces in your preferred arrangement. When you finish, close System Preferences.

Now you can start making the most of your spaces. If you open a Finder window or start up an application in one, then switch to another, you won't see those windows in the new space. Switch back to the original space, and the windows reappear.



1.11 I have three spaces defined, which enables me to switch between two different work projects and one space for what I like to think of as necessary distractions such as Web surfing.

Viewing and switching spaces

After you set up multiple spaces, you need to be able to move from one to another before they do you any good. Of course, you can use the Spaces menu in the menu bar (turn it on in the Spaces section of System Preferences), but using keyboard shortcuts is much faster. Start by pressing Ctrl as you press the arrow keys. This moves you around the grid of spaces shown in the Spaces preferences. You can also use Ctrl combined with the number keys to jump directly to a space that isn't adjacent to your current space.

If you're hopelessly confused by now, press F8 to see a bird's-eye view of your spaces (see figure 1.12). Click the one you want to use, and you're immediately moved to that space. Or, if you just want to see what each of your spaces looks like, press and hold F8; the same overview appears, and then disappears when you release F8. You can choose another key for this shortcut, as well as for using the arrow keys to switch spaces, in the Keyboard and Mouse Shortcuts area of the Spaces preferences.



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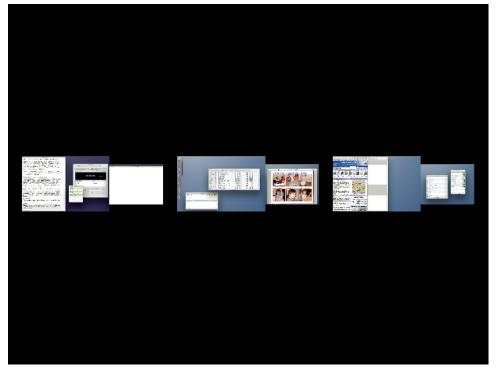
As you look at the overview of your spaces, press F9 to see Exposé's All Windows view. Click the particular window you want to see in a space, and that window jumps to the front as you switch to the new space.

To change spaces via the Dock, click an application icon to move to the first space where that program has an open window. Click again to move to the next space. As you move around from space to space, you'll notice that some dialogs such as error messages appear in whatever space you're currently using, even if their program's running in a different space.



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If you find yourself using Spaces' overview mode a lot, open System Preferences and click the Desktop & Screen Saver button. In the Screen Saver pane, click Hot Corners to assign the overview to a corner of the screen. Now you can display the overview simply by sliding your mouse cursor into the appropriate corner.



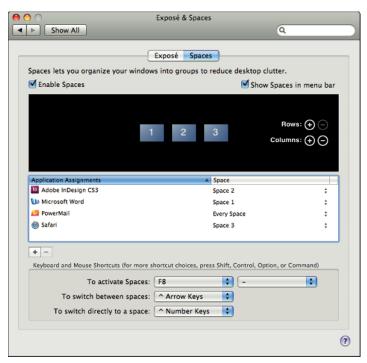
1.12 My spaces look funny because I use two monitors, so each space thumbnail shows the windows placed on both screens.

Attaching programs to their own spaces

Some people tend to take an ad hoc approach to spaces — in other words, are things getting messy? Make a new space! Others like to use the same set of spaces from day to day, and for this group it's useful to be able to stick a program to a space such that you're automatically switched to that space whenever you switch to that program. Follow these steps to do just that:

- Choose Apple menu

 System Preferences. Click the Exposé and Spaces button, then the Spaces tab.
- In the Application Assignments section of the preferences pane, click the plus button to add a program. In the Open dialog, choose the program you want to assign to a space, and then click Add.
- 3. In the right-hand column, choose the space to which you want to assign the application (see figure 1.13). From now on, whenever you open that application or it displays an alert dialog, you're automatically switched to the selected space.



1.13 By assigning PowerMail to every space, I can use it at any time without switching spaces.

4. To force an application to appear in all your spaces, choose Every Space in the right-hand column.



Note

If you're working in the Spaces preferences and you remove a Column or Row to which you've assigned applications, you see a message pointing out that those application assignments need to be changed.

Moving windows among spaces

To place a window in another space, drag it to the edge of your screen and wait a second. If there's a space in that direction, you'll switch to that space and the window will come with you. If you lose track of which spaces are located in which direction, press F8 to see the overview. This might take too long if you have a lot of spaces, so you can also move windows around in the Spaces overview simply by clicking a window in one space and dragging it to another space in the overview. Drag the blue background to move the whole space to a different position in the overview.

Another way to move windows among spaces is to press the destination space's keyboard short-cut (such as Ctrl+2 for space 2) as you click and hold the window's title bar. And finally, if you decide you want to move all the open windows to a particular space, go to the overview (press F8) and press C to consolidate them.

Automating Repetitive Tasks

Automator enables you to string together prebuilt actions into workflows that you can save and then run just like any other Mac program. You don't have to learn a programming language; all the programming is done via drag and drop. With Automator, you can spend a few minutes setting up a workflow, and then take a coffee break while your iMac does the grunt work for you. To help you envision what Automator can do for you, take a look at a sample workflow (see figure 1.14) that automatically sends birthday e-mails to people whose birthdays are recorded in your Address Book.



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Press Shift as you drag a window to a new space in the Spaces overview to bring along all the other windows from that program.



1.14 These few steps can ensure that you never forget your friends' birthdays.



Note

Automator comes with a wide selection of actions, but you can download more from sites all over the Web. Start with Apple's own Automator site: apple.com/downloads/macosx/automator/.

Renaming files automatically

One of the most boring and repetitive tasks you're likely to run into as a computer user is renaming a large number of files, and it's a job every computer user has to do at some point. This is exactly the kind of work Automator was designed to take care of for you, and it's one of the easiest workflows to design. Follow these steps:

- 1. Find Automator in the Applications folder and open it.
- 2. Click Custom and then click Choose to create a new workflow.
- In the first pane, under Library, click Files & Folders. This category contains all kinds of actions you can perform on files in the Finder, from duplicating documents to connecting to servers.

- 4. In the second pane, choose Get Folder Contents and drag it to the third pane. This first action in your workflow determines which objects the workflow will act on. If the folders you'll be working on have folders within them that also contain files to rename, select Repeat for each subfolder found check box.
- 5. Choose Rename Finder Items, also in the Files & Folders category, and drag it to the third pane under the first action. Automator asks you if you want to copy the files before it renames them so that you'll have a backup. Click Add if you want to do this, or click Don't Add if you want to skip it.



Note

If an action has a downward-pointing triangle that overlaps a semicircular tab sticking out from the top of the next action, this indicates that these actions work together. If they don't connect visually in this way, they don't work as a sequence.

6. Using the pop-up menus in the Rename Finder Items action, choose how you want your files renamed. If you need to use more than one type of renaming (such as Add Text and Change Case), add the Rename Finder Items action again (see figure 1.15).



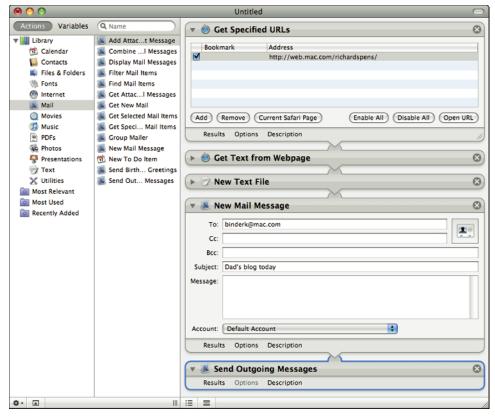
1.15 This workflow first adds the date to each filename and then makes sure all the filenames are lowercase.

- Choose File Save As. In the File Format pop-up menu, choose Application, then type a name, choose a location, and click Save.
- 8. To run the action, drag a folder onto it.

E-mailing a Web page

RSS feeds and e-mail notifications enable you to have the latest content from your favorite Web pages delivered straight to you, so you don't have to go out looking for it. Unfortunately, not all Web sites offer these features. Fortunately, you can use Automator to have Safari open a Web page at scheduled intervals, attach its text to a Mail message, and send it to you so that you can read it wherever you happen to be. Follow these steps:

- 1. Start Automator (located in the Applications folder).
- 2. Click Custom and then click Choose to create a new workflow.
- 3. In the first pane, under Library, click Internet. Most of the actions in this category use Safari.
- 4. From the Internet category, drag the Get Specified URLs action into the workflow pane. Fill in the URL of the Web page you want to mail, and give it a name if you want to add it to your bookmarks.
- From the Internet category, drag the Get Text from Webpage action into the workflow.This step essentially copies all the text from the specified Web page.
- 6. From the Text category, drag the New Text File action into the workflow. Give the new text file a name in the Save As field and choose a location for it from the Where pop-up menu.
- 7. Switch to the Mail category and drag the New Mail Message action into the workflow. Fill out the To, CC, BCC, and Subject fields, then add a message, if you want, and choose which e-mail account Mail should use to send the message.
- 8. Drag the Send Outgoing Messages action, also in the Mail category, into the workflow. It has no options to set (see figure 1.16).
- 9. Choose File ▷ Save As Plug-In. Choose iCal Alarm from the Plug-in For pop-up menu, and then give the workflow a name and click Save.
- Start iCal, then click and drag in the iCal window to create a new event.
- 11. Edit the event so that its Alarm is set to Open File, and then choose the workflow you just created.



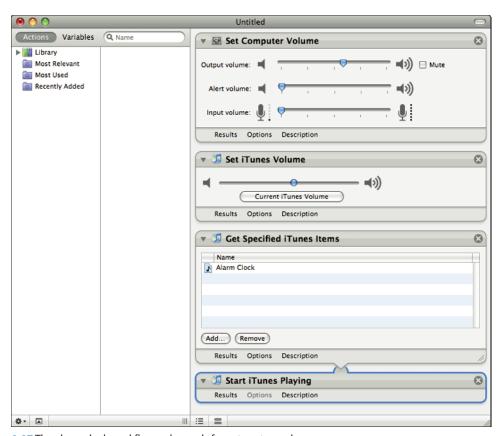
1.16 With the addition of the Send Outgoing Messages action, the workflow is complete.

Making your iMac into an alarm clock

One of the first actions I created using Automator was designed to mute my iMac's volume at the end of the workday so I wouldn't keep hearing e-mail notifications throughout the evening and be tempted to go back into my home office. Similarly, you can use Automator to start playing music or any other kind of audio content at a specified time: your own custom alarm clock. Here's how to create the workflow you'll need and then schedule it:

- In iTunes, set up the playlist you want to automate. You can include Internet radio stations as well as songs.
- 2. Start Automator (located in the Applications folder).
- 3. Click Custom and then click Choose to create a new workflow.

- In the first pane, under Library, click Utilities. These actions can start programs and modify system settings.
- Drag the Set Computer Volume action into the workspace. Adjust the sliders to set the volume to your preferred level.
- **6. In the Library, click Music.** Most of the actions in this category use iTunes.
- Drag the Set iTunes Volume action into the workspace. Adjust the slider again to set iTunes' volume level.
- 8. Drag the Get Specified iTunes Items action, also from the iTunes category, into the workspace. Click Add, choose the playlist you created in Step 1, and click Add again.
- Drag the Start iTunes Playing action, once again from the iTunes category, into the workspace. Figure 1.17 shows the completed workflow.



1.17 The alarm clock workflow only needs four steps to work.



Note

If you're anything like me, you adjust your computer and iTunes volume several times each day. That's why it's important to add the two Set Volume actions to the workflow. Whether you mute the volume to take a phone call or crank it up when your favorite song starts playing, you'll be happier if the alarm clock volume isn't too soft or too loud but just right.

- **10. Choose File □ Save As Plug-In.** Choose iCal Alarm from the Plug-in For pop-up menu, and then give the workflow a name and click Save.
- 11. Start iCal, and then click and drag in the iCal window to create a new event.
- 12. Edit the event so that its Alarm is set to Open File, and then choose the workflow you just created.



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To add a light show to your musical alarm, you can add the Start iTunes Visuals step at this point in the workflow. The only option you need to set is what size you want the Visualizer to be.

Recording your actions for playback

Automator's library of premade actions is broad, but not particularly deep, meaning that it covers a lot of different areas but with only a few commands for each. If the actions you need to build a workflow don't exist in the Library, you can create them by having Automator record a series of steps you perform.

Before you start recording, decide what your iMac should be doing when this action is played. For example, you might have earlier steps in the workflow start up certain programs, so those programs should be already running when you start recording. Once you're set up, start Automator (located in the Applications folder) and click Custom followed by Choose to create a new workflow. Add preexisting actions if necessary, then click Record to create a Watch Me Do action (see figure 1.18).



1.18 Whatever I do while Automator is recording is added to the Watch Me Do action.



Before you can record in Automator, you need to turn on Enable access for assistive devices in the Universal Access section of System Preferences (located in the Apple menu).

Perform the steps that you want to record. Don't rush—you want to make sure that you don't do anything extraneous and that Automator has a chance to catch everything you do. When you're done, click Stop. Now you can drag the slider to adjust the playback speed. In most cases, you'll want this action to go as quickly as possible, so you'll drag the slider all the way to the right. Complete your workflow by adding any other steps that are needed, and then save it.

Finding Lost Files

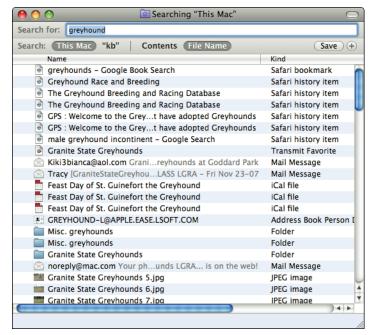
Organization is a good thing, but it's not nearly as necessary as it used to be with Mac OS X's powerful ability to find just about anything with just one or two search terms. Spotlight, the name for the search technology that your iMac uses, relies on a comprehensive index of everything (and I do mean everything) on your iMac, from e-mail to the Web pages you visit to the songs you download in iTunes. You can search your computer in more than one way, but the search is always based on Spotlight technology.

Doing a simple Spotlight search

The quickest way to invoke Spotlight and get it looking for your information is to press \(\mathbb{H} + \text{space-bar}\) to open the Spotlight menu at the right end of the menu bar. Then type your search terms. Before you're even done typing, Spotlight starts throwing up results right there in the menu. If you find what you want, your search is over; just choose the item from the menu to open it. Or choose Show All, at the top of the menu, to display the search results in a Spotlight window (which is really just a Finder window) where you can sort them or modify your search further (see figure 1.19). If you know you'll need to narrow your search after it's begun, you can skip the Spotlight menu and start out in a Spotlight window by pressing \(\mathbb{H} + \text{Option} + \text{spacebar}. \)

As I mentioned, this method of searching combs through every scrap of information on your iMac looking for the specified search terms. Sometimes, though, that's overkill. If you're pretty sure that the information you're seeking resides in a standard document, such as a text file or a spreadsheet, you can use the search field in the Finder's toolbar instead; this restricts the search to individual documents and leaves out larger databases such as your Address Book and iCal information. To

search this way, start in single-window mode so you can see the search field, and then click in it and type your search terms; or press $\Re+F$ any time you're in the Finder to jump straight to the search field. The Finder will create a new window for you if one isn't already available; your search results will be displayed in that window.



1.19 From the Spotlight window, I can add as many criteria as I need to narrow my search more.



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If you're certain that your search term is in the desired file's name, hold down Shift as you press %+F and you'll find that the although the Contents button in the search window is still selected, Spotlight has cleverly added a Name contains criterion to the search, and that's where your cursor has landed.

Using more-complex search criteria

It's certainly possible to conduct a Spotlight search based solely on a few words of text, but if that results in hundreds or even thousands of hits, you're going to want to narrow your results a bit rather than sort through the entire list. You can do that by adding additional criteria in the Spotlight window.

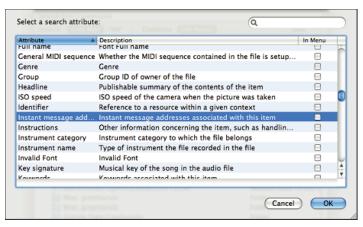
Click the plus sign at the right-hand end of the window's Search bar to add a search criterion. In the new row of menus, choose what you want to base the criterion on from the first menu, and then fill in your restrictions. For example, if you choose Created date from the first menu, you'll then need to choose an option such as within last or yesterday from the second menu, and you might need to type even more information based on that second choice.



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You can set up a group of conditions so that a file meeting any one of them is included in the search results. Instead of clicking + to add search criteria, Option+click the button, which changes from a plus sign to an ellipsis. Choose Any, All, or None from the pop-up menu, then set your criteria and run your search.

You can set up as many criteria as you want and adjust them as you see what files are contained in your search results. They can use the basic parameters in the first criteria menu (Kind, Last modified date, Created date, Name, or Contents) or more exotic file attributes found via the Other menu choice (see figure 1.20).



1.20 Some of the criteria on which you can build a search are just mind-boggling.

Saving a search for future use

If you've used Spotlight to conduct a search that you're likely to do again in the future (say, all files modified in the last week that contain the word "greyhound"), you can save that search as a smart folder. Follow these steps:

- 1. Press #+spacebar and type your search terms in the Spotlight search field.
- In the Spotlight menu, choose Show All.

- 3. Click the plus button to add search criteria that will narrow your results, if needed.
- 4. Click Save.
- 5. Type a name and choose a location for the smart folder. Now, any time you open that folder, it will contain the updated results of the search you just performed. And, if you leave the save location set to the default (the Saved Searches folder), your saved searches will appear in the sidebar under Search For.

Pumping up the Spotlight Menu

The special criteria on which you can base a search using the Spotlight window are also available to you in the Spotlight menu — if you're willing to memorize the keywords that apply to each criterion.

You can add a file-type parameter to a search in the Spotlight menu; just type kind:pdf, for example. (Don't put a space after the colon when you're typing these keywords.) The types you can specify include anything that appears in the Kind column when you're looking at a Finder window in List view: Alias, Application, Folders, JPEG Images, MP3 Audio Files, and ZIP Archive, for starters. You can also search for a file modified on a particular date; try searching for date:yesterday or "date:8/1/08, for example. Adding math operators makes this feature even more powerful; you can insert > (greater than) or < (less than) to find files dated after or before the date, or specify a date range using a hyphen (–).

There are about a hundred more keywords that you can access via the Other option in the Spotlight window's first search criteria menu. If you're a fast typist, though, you may prefer to use text keywords in the Spotlight menu for all of these, too. To find out how to type them, open this file: /System/Library/Frameworks/CoreServices.framework/Frameworks/Metadata.framework/Resources/English.lproj/schema.string. The term in the first column, minus the introductory kMDItem, is the keyword to use. To learn more about how to use these text keywords in Spotlight searches, check out the article on Mac writer Kirk McElhearn's excellent Web site (mcelhearn.com; search for "Spotlight's Secret Search Syntax").