Installing Panther without the Hassle

Save Time By

Discovering the benefits of Panther

Technique

- Selecting the appropriate installation method
- Using Disk Utility
- Installing Panther
- Working with Setup Assistant
- Transferring your existing files to a new installation

Before you can discover the magic of Apple's latest, greatest operating system, you need a version of it running on your Mac. You might even wonder whether Mac OS X Panther is right for you. Because you're holding this book, the answer is presumably yes, but to explain why, we begin this Technique by discussing some of Panther's benefits and new technologies.

The installation process itself has a few variables, and comprehending the different choices can not only save you time during the installation process but also give you a more reliable operating system over the long haul. You should also be able to make knowledgeable decisions about formatting and partitioning your disk drive before you install the OS. Finally, we show you how to breeze through the *Setup Assistant* (Apple's program for easing you through the startup process) and then wrap up with a discussion of foolproof file transfers.

What Panther Can Do for You

The benefits of using Panther break down into two broad categories: operating system improvements and better versions of Apple's many wondrous applications. What you'll find in Panther itself is

- A new style of Finder windows with improved navigation, much better search capability, and built-in *actions* (which are kind of like contextual menus)
- The return of *Labels*, the much maligned but still used Mac OS 9 feature that dropped off the radar in previous versions of OS X
- Greatly improved Open and Save dialogs for applications
- Exposé, which is a fantastic tool for immediate access to open windows and documents
- Built-in fax software that allows you to send and receive faxes via your computer without third-party applications
- Better integration with your iDisk for .Mac users

- Surprisingly easy security provided by *FileVault*, which is an encryption tool for your folders and files
- The ability to more readily access different user accounts thanks to Fast User Switching

Because the other Apple applications are critical to the functionality of the operating system as a whole, most of the applications that Apple provides with Panther have also had a makeover and some new ones have even been created. Specific benefits of these include

- The introduction of *Font Book*, which is a font management application that can take the place of third-party tools for most users.
- Even more reasons to use *Mail*, which is Apple's aptly named e-mail client (see Technique 33).
- A speedier and more useful version of *Preview*, which is Mac OS X's default viewer for PDF documents and images. More importantly, Preview now supports many common PDF features like hyperlinks, bookmarks, and full-text searching.
- Modest changes to Address Book (personal information management software), giving it even more cause to be a regular resource for every Mac user.
- A new version of the popular iChat messenger service, *iChat AV*. You can now save oodles of time and money doing video or audio conferencing with your computer and a FireWire-enabled video camera. (This application is available to Jaguar users for \$29.95.)
- The advent of *Xcode*, which is a tool for creating applications. Xcode is a sophisticated new version of Project Builder, which developers will love and the general public can safely ignore. (This application is available to Jaguar users at no cost.)

All these improvements, new applications, and features can be yours for the low, low cost of . . . okay, the not-so-low cost of \$129. But that's a beauty of an operating system.



The price of Panther (\$129) is the same whether you're upgrading from Jaguar or buying a version of OS X for the first time.

To further convince you, consider that an overriding benefit of installing Panther is that you'll be using the most current version of Apple's operating system. This means that you can take advantage of all of Apple's future development of applications and patches, which will be designed with Panther in mind.



If you own more than one Macintosh, consider the Family Pack version of Panther, which gives you license to install the OS on up to five machines for the bargain price of \$199. If time truly is money, this tip alone could save you hours!

Minimum System Requirements

In order to use Panther, Apple recommends that you have one of the following computers:

- Power Mac G5
- Power Mac G4
- Power Mac G3 (Blue and White)
- PowerBook G4
- PowerBook G3 with built-in USB
- 🖊 iMac
- 🖊 eMac
- 🖊 iBook

Apple also recommends that you have at least 128MB of RAM (we recommend 256MB or more, but you can get away with less if you never use Panther's Classic mode), a supported display, and at least 2GB of available disk space. (You need 3.5GB if you want to install the Developer Tools as well.) You're welcome to attempt to install Panther even if you don't meet the above requirements, but you do risk having a bum computer and wasting a whole heck of a lot of time in the process.

Choosing an Installation Method

If you just purchased a brand new Mac, making yourself the envy of the neighborhood, you should be sitting there with a fresh copy of Panther purring away. In that case, you can skip ahead a bit to the section "Working with Setup Assistant" to see how to whip through the Setup Assistant. If you don't have Panther installed yet but are the proud owner of some shiny new installation discs, it's time to put them to use.

Before you begin, take a minute to think about what type of installation you want. You have three options:

Upgrade a previous version of Mac OS X: Upgrading is the easiest and least timeconsuming option to use — in the short run, that is. One drawback, however, to upgrading an existing OS is that your hard disk will be become bloated with deadwood files. The resulting OS can be a little buggy, inheriting problems from its predecessor.

If you want to install Panther and get on with your life with a minimum of fuss, choose the upgrade option.

Erase and Install: This option is the most taxing and time-consuming (and drastic) of the three. On the bright side, you do end up with an untouched hard drive and a brand spankin' new OS. On the other hand, you wipe out all your files and applications in the process.



Absolutely, positively do not use the Erase and Install option unless you've got multiple backups of all your files, drivers, and software. This option does exactly what it says: erases the contents of your entire hard drive.

 Archive and Install: This happy medium between your other two install choices creates a new system folder with new copies of all the OS stuff, but it also allows you to maintain all the user files and non-Apple applications. Although Apple doesn't promote this feature as the recommended type of installation, we're quite fond of it ourselves. It gives you the benefit of a clean system folder (without the deadwood created by an upgrade) without the serious drawback of having to reinstall all your applications and files.



The Archive and Install option throws all the existing system files and Apple applications in a folder called Previous Systems. After you're convinced that no valuable information has been overwritten by the recent installation, delete this folder to clear up space on your hard drive.

Managing Your Disk Drives

Along with deciding what type of installation you want to perform, another topic worth your consideration before you install Panther is the formatting and partitioning of your hard drive (or drives). To clarify:

- Formatting a disk drive is the process of erasing its contents and telling the blank drive how to structure the files stored on it.
- Partitioning a disk drive is the process of breaking a single drive into multiple volumes. Your computer still has the same number of physical hard drives, but the operating system behaves as if there were more. (Each volume appears as a separate drive in Finder and other software.)



Practically anything you do with the Disk Utility application requires erasing your entire hard drive. Although Disk Utility warns you before it does anything so drastic, we'd advise you not to use the application unless you've first backed up everything that you need.

Both of these tasks are accomplished by using the Disk Utility application (see Figure 1-1), which can be found in the Utilities folder and on the first Panther

installation disc. If you have multiple drives or volumes, Disk Utility can format or partition any volume except for the one on which it resides (because it can't erase itself). If you want to format or partition the drive that contains Disk Utility, you need to use the installation discs.

	Disk Utility	
urn Newlmage Mount Eject	t Enable Journaling Info	
≝ 37.3 GB IC25N040AT Main ⊒ Panther	First Aid Erase Partition RAID Restore To use First Aid, select the volume and click a repair button. • You can verify or repair any towner form at upported by Mac OS X. • First Aid cannot repair a verify population of the Mac OS X. • First Aid cannot repair a verify bottom. • First Aid cannot repair a verify population of the Mac OS X. • First Aid cannot repair a verify bottom. • Volume you for the startup disk, boot from the Mac OS X. • First Aid cannot repair between the Mac OS X. • First Aid cannot repair between the Mac OS X. • First Aid cannot repair between the Mac OS X. • First Aid cannot make repairs, try other disk repair programs or back up your d and erase the volume.	

• Figure 1-1: The Disk Utility application manages your hard drives.



If you plan either an Upgrade or an Archive and Install installation, do not reformat or partition your hard drive because there will be nothing to upgrade or archive. If you're performing an Erase and Install, the installer can handle basic formatting (but not partitioning) for you.

- **1.** Start your computer with the first Panther installation disc.
- **2.** At the first screen that appears (for language selection), select Open Disk Utility from the Installer menu (see Figure 1-2).
- **3.** Follow the appropriate steps in one of the next two sections to either format or partition your drives and volumes.



• Figure 1-2: Click the Installer menu to access Disk Utility.

Formatting a volume

To format a volume with Disk Utility:

- **1.** Click the volume icon in the left column. (A disk's volumes appear under the disk's icon.)
- **2.** Click Erase.
- **3.** Select a Volume Format.

The Volume Formats are

► Mac OS Extended

This used to be the default format and is the safest choice.

Mac OS Extended (Journaled)

Journaling support has just recently been added by Apple. You don't really need to understand the details of what it does to appreciate that it allows you to more accurately recover your computer in the event of a disaster. Feel free to use this format because Apple now uses it as the default.

► UFS (Unix File System)

If you choose to format with UFS, you render the hard drive unrecognizable by some operating systems (in particular, OS 9). For this reason, we'd advise you to stay away from it. Name box.

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Enter the volume's name (see Figure 1-3) in the

• Figure 1-3: Reformatting a disk's volume.

5. Click Erase to reformat the volume.



4.

When reformatting a hard drive, you can choose to Zero All Data (available by clicking the Options button). Doing so will exponentially increase how long it takes to reformat the drive, but it's the best way to both clean the drive and ensure that it's working properly.

Partitioning a disk drive

To partition a disk drive into multiple volumes:

1. Click the drive's icon in the left column.

The drive will have a strange name consisting of the size and model of the device.

- **2.** Click the Partition tab.
- **3.** Select a scheme from the Volume Scheme dropdown menu (see Figure 1-4).

A volume's scheme refers to how many partitions you want to create. Hard drives 20GB or larger can be nicely divided into two partitions.



• Figure 1-4: Opting for two partitions as the volume's scheme.

4. One at a time, select every partition in the volume scheme window (named Untitled 1 and Untitled 2 in Figure 1-4). Type a name in the Name box and select a format type in the Format drop-down list for each.



Disk Utility automatically partitions a disk into equally sized volumes. You can override this by clicking and dragging the bar that separates the volumes in the scheme window.

5. Click the Partition button to enact the changes.

Using RAIDs

If your computer has multiple hard drives, you can establish a RAID (Redundant Array of *Inexpensive* Disks or Redundant Array of *Independent* Disks, depending upon whom you ask) on them with Disk Utility. A *RAID* treats multiple drives as one single device, offering either better performance or better reliability (or sometimes both), depending upon how it's defined.

Unless you're doing high-end video or image processing or are supremely concerned about a disk drive failure, a RAID is a waste of disk space. **Remember:** Creating a RAID on your disk drives erases all the current content.

Installing Panther

The installation process is fairly obvious, particularly after you understand the options, but we'll run through the steps and highlight a few important considerations nonetheless. To install Panther:

1. Update your computer's firmware.

Apple always recommends that you do this, pointing you to www.apple.com/support/ downloads. Once there, click your computer model under Updates by Product in the righthand column. This will take you to a results page where you probably *won't* find an update for your firmware. We're not suggesting that you skip this step, but don't be surprised if it's less than fruitful.

2. Insert the first Panther disc into the disc drive (make sure that you have all three CDs), doubleclick the Install Mac OS X icon, click Restart (see Figure 1-5), and wait for your Mac to reboot.



• Figure 1-5: Restart your computer to begin installing Panther.



You can also begin installing Panther by holding down the C key while your computer starts up or selecting Mac OS X Install Disc 1 in the Startup Disk preferences panel (assuming the CD is in the CD drive).

- **3.** Select the language that you want to use and then click Continue.
- **4.** Read through the introductory text on the first two pages, clicking Continue to go on.



The information presented on the second page is duplicated in the Read Before You Install PDF file found on the first installation disc. It mostly covers Panther's compatibility issues.

5. Accept the license agreement by clicking Continue in the main window and then Agree on the sheet that appears from the top of the window.

You don't have to accept the license agreement — unless you want to install Panther, that is. If you click Disagree, you exit the installer and are returned to your normal operating system world. One could argue, therefore, that to save time, you just skip reading the agreement (because you have to agree with it regardless). We'd never be so irresponsible as to suggest that you skip reading the agreement, though. (Cough, cough.)

6. On the Select a Destination page that appears, select the destination drive for the installation but don't click Continue just yet (see Figure 1-6).

The installer will present a list of available volumes where you can place Panther. The installer will even mark the recommended destination with a green arrow and unusable destinations with a red X.



• Figure 1-6: The destination determines where Panther will be installed.

If you have a decent-sized hard drive (20GB or more), hopefully you partitioned it into two or more separate volumes. If so, you can do a clean install of an OS onto the second volume, maintaining all your files and applications on the original volume, just in case. See "Managing Your Disk Drives" for more information on partitioning.

- **7.** Before you leave the Select a Destination page, click Options at the bottom of the window.
- **8.** In the Options dialog that appears (see Figure 1-7), select the appropriate installation method (see the earlier section "Choosing an Installation Method"). Click OK to close the Options dialog and then click Continue in the Select a Destination window.

Your choices are

- ► Upgrade
- Archive and Install
- ► Erase and Install

O Upgrade Mac OS X
Upgrades an earlier version of Mac OS X.
Archive and Install
Moves existing System files to a folder named Previous System, then installs a new copy of Mac OS X. You cannot start up your computer using the Previous System folder.
Preserve Users and Network Settings
Imports existing user accounts, their home folders, and your network settings into the new system. You will skip the Setup Assistant when installation is complete.
O Erase and Install
Completely erases the destination volume then installs a new copy of Mac OS X.
Format disk as: Mac OS Extended (Journaled)
Cancel OK

• Figure 1-7: The Options dialog is where you select your installation type.



If you select the Archive and Install option, you absolutely, positively want to select the Preserve Users and Network Settings check box; otherwise, you'll need to recreate all your files from the archive, which is an unnecessary hassle.

If you select the Erase and Install option, you have the choice of formatting with either the Mac OS Extended (Journaled) or Unix File System (UFS) formats. You almost certainly want the former, but read the "Managing Your Disk Drives" section for more information.



If you perform an Erase and Install of Panther, all your existing applications — along with your files — are wiped out. If you don't have all the application disks and serial numbers written down somewhere, you also lose some software in your transition.

- **9.** On the Installation Type page that appears, click the Customize button at the bottom of the screen.
- **10.** In the Customize dialog that appears, deselect all the features that you won't use (see Figure 1-8).

00	Install Mac OS X			
Custom Install on "Primavera"				
	Package Name	Action	Size	
@ Introduction	✓ Essential System Software	Install	925MB	
e nord Ma	BSD Subsystem	Install	225MB	
O Read Me	Additional Applications		335MB	
⊖ License	Printer Drivers		717MB	
Select Destination	Additional Speech Voices	Skip	0 bytes	
⊖ Installation Type	Fonts		167MB	
O installing	▶ M Language Translations		695MB	
Installing	▼ x11	Install	101MB	
Finish Up				
	Space Required: 3.1GB	Remaining: 9.4GB		
	This package contains additional speed	h voices that enhance	the	
	speech technology in Mac OS X.			
Contraction of the local division of the loc				
	(Easy Install)	(Go Back) (Install	

• Figure 1-8: Customize your installation to fit your needs.

The most important timesaving consideration when installing Panther is to avoid installing features that you'll never need. This will save you time now and disk space in perpetuity. The options that you can choose to forgo include

- BSD Subsystem: The BSD Subsystem takes up about 222MB of space but is well worth it, particularly if you're anything but the most basic Panther user. Don't skimp on this one!
- ► Additional Applications: The Additional Applications include Internet Explorer, Stufflt Expander, iTunes, iMovie, iPhoto, iCal, and iSync. You'll probably want all of these, but go ahead and drop those you won't use.
- Printer Drivers: If you don't have a printer, you won't need these at all, so deselect this option and save a whopping 922MB of disk space. If you do have a printer, choose to install the drivers that correspond to the make and model of your printer.

- Additional Speech Voices: The speech voices only require 29MB of space, but that's 29 more megabytes than necessary if you never use them. We don't. You probably won't either.
- ► Fonts: Although Apple's been kind enough to include the fonts, an informal poll of ours concluded that most Panther users don't read much text written in Inuktitut or Gujarati. If that accurately describes you, drop all the fonts, along with the standard Asian ones (Japanese, Chinese, and Korean). You'll save yourself 172MB of room (possibly for MP3s) in the process.
- ► Language Translations: If everyone using the computer primarily reads and writes English, deselect the 389MB of language translations that the OS will never use.
- ► X11: This option is admittedly close to our hearts and requires a meager 82MB of space. Installing it will open up your Mac to a whole world of free (*free!*) software and make these geeky authors proud. X11 provides a graphical user interface to UNIX applications, such as the GIMP image manipulation tool, games, various text-editing programs, and a wide array of scientific tools. Although these UNIX applications will not look or act as nice as native Mac OS X applications, the ability to run them is still very valuable, and the price is right.



If you don't install the BSD Subsystem, be aware that you won't be able to use many of the more techie features of Panther, including a few that we list in this book. This includes command line utilities and some Internet and networking software.

- **11.** After you select what you want installed, click OK to close. You can also click Easy Install to cancel the customization. Lastly, click Continue in the main installation window.
- **12.** On the final installation page, click Install to begin the actual installation process.



You can quit the installer any time up until you click the Install button. After you do that, get out a good book because you'll have to wait out the installation (easily 15–30 minutes, depending upon your computer and the installation choices made).

13. The first step that the installer takes is to check for problems on the destination volume. You have the option of skipping this step (click Skip in the lower-right corner), but you should let the installer do its thing.



If the installer fails while checking the integrity of your disk, you need to use Disk Utility to perform repairs before attempting the installation again.

- **14.** When the installation finishes, your computer automatically restarts. (You can also click Restart at the prompt.)
- **15.** If necessary, follow the onscreen instructions to insert discs 2 and 3.

After your computer reboots — and is therefore running off the new OS on your hard disk — the installation process might continue if you've elected to install some of the optional components listed in Step 10. For example, if you're installing extra fonts and printer drivers, you'll be prompted for disc 2; if you elected to install X11, disc 3 will be required.



The installer CDs can also be used for three administrative purposes: changing the Startup Disk, resetting a password, and accessing a version of Disk Utility not running on the main hard drive (see "Managing Your Disk Drives"). Each of these is accessible through the Installer menu.

Working with Setup Assistant

If you perform an Erase and Install installation of Panther, or if you're using your computer for the very first time, you get the magic of the Setup Assistant when your computer reboots. Like its Windows counterpart, Setup Assistant asks you a series of questions intended to make using the computer easier. Here are the highlights of the process so that you can whip through it more quickly:

1. Select your language.

2. Select your keyboard layout.

For both of the preceding steps, the defaults will most likely work. Apple's kind enough not to display all the options, but you can get them by clicking the box at the bottom of the window.

3. Decide what you want to do for an Apple ID.

You have three options:

- ▶ Enter your existing ID, if you have one.
- Create a new Apple ID.
- ► None of the above.

You already have an Apple ID if you've registered for any of the special areas at www.apple.com or if you have a .Mac account (which will be the same as your Apple ID).

If you don't already have an Apple ID or a .Mac account, we strongly recommend creating one, which will give you a 60-day trial .Mac account. If you like the trial, you can pay for a permanent account. We both have one and think it's well worth the \$99 yearly price.



You can get a free trial .Mac membership when you go through Setup Assistant. Because we refer to some .Mac stuff throughout this book, you really ought to consider signing up, even temporarily.

4. If you want, register.

Unlike Windows XP, which requires activation of the operating system, you can forgo Panther registration entirely. If you don't feel like registering, press \Re +Q to quit the registration application. You will then be given the option to skip registration entirely (and continue with Setup Assistant), shut down the computer, or cancel.

5. Create your user account.

To create your account, enter your full name, the short name (which the computer will treat as your username), and a password. Ideally, your short name should consist only of letters, numbers, and the underscore, and be eight characters in length or shorter.



You can skip the password and verify prompts if you'd rather not have a password. This will expedite many tasks but will also make your computer far less secure.

6. Select your Internet access type and then click Continue.

There are four options:

- Two different ways of setting up an EarthLink account.
- Use your existing Internet service.
- I'm not ready to connect to the Internet.

7. Follow the prompts to complete the Internet setup.

As long as you didn't select I'm Not Ready to Connect to the Internet in Step 6, you're led through a connection setup wizard. If you're using an existing service, have your Internet information written down and ready for when you go through Setup Assistant. Getting the information correct here will save you the hassle of configuring your network later, although you always have that option.

You need to know some combination of the following:

- Connection type (telephone modem, cable modem, and so forth)
- User name
- Password
- Phone number (for telephone dialup)
- Subnet mask, router address, DNS hosts, and Domain Names (for DSL, cable modems, and other networks)



Your Internet service provider should give you detailed connection information to use during the Internet setup process.

8. Select your time zone, confirm the current date and time, and start using Panther!

Transferring Files Flawlessly

In Technique 14, we discuss how to organize and maintain your files and folders. Panther comes with a good implicit organization scheme that you really ought to follow. If you do so, you can restore all your documents, bookmarks, e-mail, and so forth merely by copying the contents of your old Home directory to your new user directory. Even if you use the painless Archive and Install installation option, saving the contents of the Users folder to an external source before you begin installation (hard drive, CD-ROM, DVD) is a prudent move.

While we're at it, we recommend that you have at least one reliable backup of all your data at all times. If you're installing a new version of the operating system, you want two or more backups that use different media. (You can never be too careful.)



The Backup application is provided free to .Mac users. Version 2 of the application can back up files to your iDisk, a CD or DVD, and even external hard drives.

Be sure that your backups aren't in a proprietary format (for example, the Retrospect Express cataloging system; www.dantz.com) because you won't be able to get to the data until your computer can read that format again.



We highly recommend making a CD-ROM of installed applications that also contains a text document with all your serial numbers. This fairly simple step makes restoring the software on your computer a snap!