

# 1 Technique

## Installing Tiger without the Hassle

### Save Time By

- ✓ Discovering the benefits of Tiger
- ✓ Selecting the appropriate installation method
- ✓ Using Disk Utility
- ✓ Installing Tiger
- ✓ Working with the 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 Tiger 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 Tiger'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 give you a more appropriate version of the operating system. You should also be able to make knowledgeable decisions about formatting and partitioning your hard 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 Tiger Can Do for You

Whereas Panther added a ton of obvious new features to the operating system and Apple applications, Tiger's additions are more subtle, although no less useful. Compared to its predecessor (Panther), what you find new in Tiger is

- ✓ *Spotlight*, a great search tool
- ✓ *Automator*, for creating sequences of common steps within Apple applications
- ✓ Many new features in Mail
- ✓ An improved version of Safari, which can now handle newsfeeds
- ✓ The ability to perform video and/or audio conferencing in iChat
- ✓ *Xcode 2*, the latest version of the most excellent development tool
- ✓ *Dashboard*, a quick way to access different little utilities

Apple has also made quite a few behind-the-scenes alterations that you probably aren't aware of but which might make for a faster Mac. Tiger supports 64-bit addressing (a good but very geeky thing); dual processors (like the higher end G5); a new kernel (an even geekier thing); and new graphics and video infrastructure. There's really nothing more to say about these new features in this book (because, well, they just do their thing behind the scenes), but we wanted you to know that Tiger adds more than just the visible applications and features that we mention.

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



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

To further convince you, consider that an overriding benefit of installing Tiger 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 Tiger in mind.



If you own more than one Mac, consider the Family Pack version of Tiger, 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

To use Tiger, 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
- ✓ Mac mini

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 Tiger's Classic mode), a supported display, and at least 2GB of available hard drive space. (You need 3.5GB if you want to install the Developer Tools, as well.) You're welcome to attempt to install Tiger even if you don't meet the 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 Tiger purring away. In that case, you can skip ahead to the section "Working with Setup Assistant" to see how to whip through the Setup Assistant. If you don't have Tiger installed yet but are the proud owner of some shiny new installation discs (or a single shiny DVD), 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 time-consuming option to use — in the short run, that is. One drawback, however, to upgrading an existing OS is that your hard drive becomes bloated with dead-wood files. The resulting OS can be a little buggy, inheriting problems from its predecessor.



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

- ✓ **Erase and Install:** This option is the most taxing, 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 the other two installation 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 (minus 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 Hard Drives

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

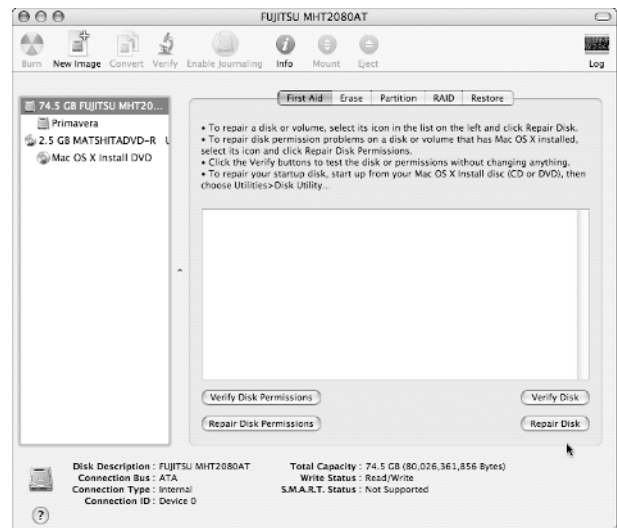
- ✓ **Formatting** a hard drive is the process of erasing its contents and telling the blank drive how to structure the files that will later be stored on it.

- ✓ **Partitioning** a hard 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 advise you not to use the application unless you've first backed up everything that you need.

You accomplish both of these tasks by using the Disk Utility application (see Figure 1-1), which you can find in the Utilities folder and on the first (or only) Tiger 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 boot your Mac from the installation discs.



• **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 (or only) Tiger installation disc.
2. At the first screen that appears (for language selection), choose Utilities → Disk Utility (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:** Open the Utilities menu to access Disk Utility.

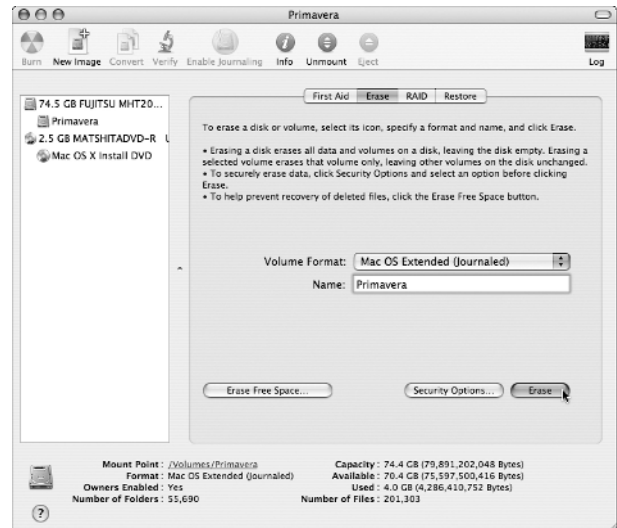
## Formatting a Volume

To format a volume with Disk Utility:

1. Click the volume icon in the left column.  
A hard drive's volumes appear under the hard drive's icon.
2. Click the Erase button.
3. Select a Volume Format.  
The volume formats are:

- **Mac OS Extended (Journaled):** You don't really need to understand the details of what journaling 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.
- **Mac OS Extended:** This used to be the default format and is also a safe choice.
- **MS-DOS:** MS-DOS . . . a Windows-compatible format. Yuck.
- **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 advise you to stay away from it.

4. Enter the volume's name (see Figure 1-3) in the Name text box.



• **Figure 1-3:** Reformatting a hard drive's volume.

5. Click Erase to reformat the volume.



When reformatting a hard drive, you can choose from several options by clicking the Security Options button. The options range from *Don't Erase Data* to *35-Pass Erase*. Choosing anything other than *Don't Erase*

Data exponentially increases 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. If you're very security conscious and/or a little paranoid, the *35-Pass Erase* option rewrites your disk 35 times, making the data virtually impossible to recover. It also takes hours or days to complete!

## Partitioning a hard drive

To partition a hard 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.

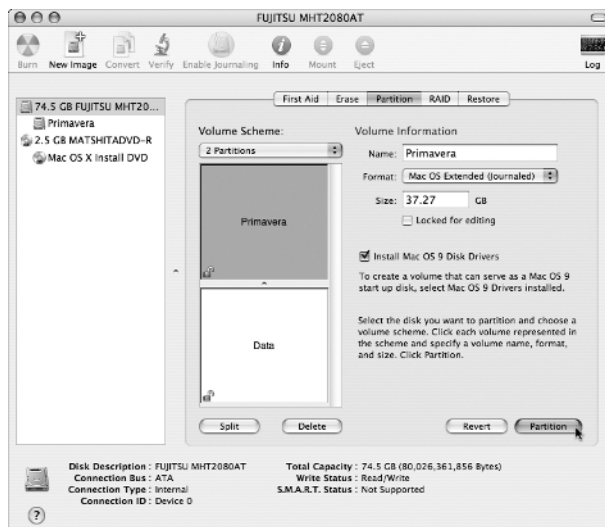
2. Click the Partition tab.



The Partition tab is an option only when you select the entire hard drive.

3. Select a scheme from the Volume Scheme drop-down list (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 Primavera and Data in Figure 1-4).



Disk Utility automatically partitions a hard drive into equally sized volumes. You can override this by clicking and dragging the bar that separates the volumes in the scheme window. Alternatively, you can specify a size for each partition (in gigabytes) by using the Size text box.

5. Type a name in the Name text box and select a format type in the Format drop-down list for each partition.
6. Click the Partition button to enact the changes.

## Installing Tiger

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

1. Update your computer's firmware.

Apple always recommends that you do this, pointing you to [www.apple.com/support/downloads](http://www.apple.com/support/downloads). When you're there, click your computer model under Updates by Product in the right column. This takes 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 Tiger disc into the disc drive (make sure that you have all three CDs or a single DVD), double-click the Install Mac OS X icon, click Restart (see Figure 1-5), enter your password if prompted, and then wait for your Mac to reboot.



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



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

3. Select the language that you want to use and then click the arrow.
4. Read through the introductory text on the first two pages, and click Continue to go on.
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 Tiger, 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 presents a list of available volumes where you can place Tiger. The installer even marks the recommended destination with a green arrow and unusable destinations with a red X.



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

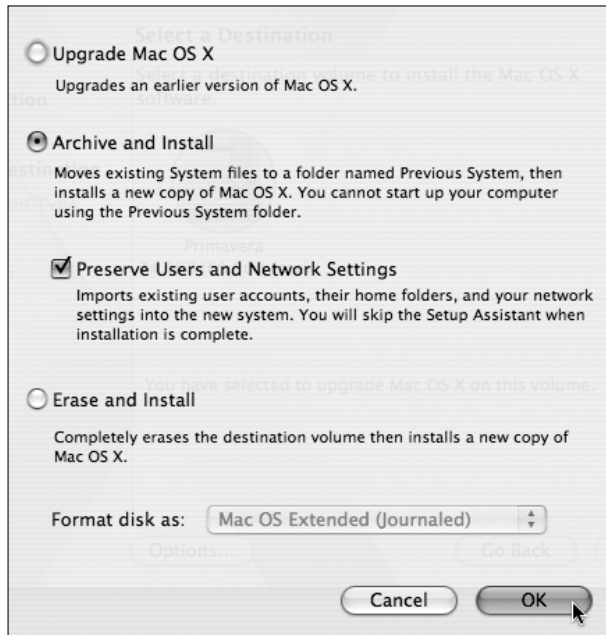


If you have a decent-sized hard drive (20GB or more), hopefully you partitioned it into two or more separate volumes. If so, you can do a clean install of an OS onto the second volume, maintaining all your files and applications on the original volume, just in case. See “Managing Your Hard Drives” for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

Your choices are

- ▶ Upgrade Mac OS X
- ▶ Archive and Install
- ▶ Erase and Install



• **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 the options presented earlier in this chapter. You almost certainly want to use Mac OS X Extended (Journaled), but read the “Managing Your Hard Drives” section for more information.



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

9. Click OK to close the Options dialog, and then click Continue in the Select a Destination window.
10. On the Easy Install page that appears, click the Customize button at the bottom of the screen.
11. In the Customize dialog that appears, deselect all the features that you won't use (see Figure 1-8).



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

The most important timesaving consideration when installing Tiger is to avoid installing features that you'll never need. This saves you time now and hard drive space in perpetuity. The options that you can choose to forgo include

- **Printer Drivers:** If you don't have a printer, you won't need these at all, so deselect this option and save a whopping 1.1GB of hard drive space. If you do have a printer, choose to install the drivers that correspond to the make and model of your printer.
- **Fonts:** Although Apple's been kind enough to include the fonts, an informal poll of ours concluded that most Tiger 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 save yourself 130MB of room (possibly for MP3s) in the process.

- **Language Translations:** If everyone using the computer primarily reads and writes English, deselect the 1GB of language translations that the OS will never use.

Depending upon what Apple decides to do in later installers (we were using a beta version when writing this), you might also be able to install

- **Additional Applications:** The Additional Applications include Internet Explorer, StuffIt Expander, iTunes, iMovie, iPhoto, iCal, and iSync. You'll probably want all of these, but go ahead and drop those you won't use.
- **Additional Speech Voices:** The speech voices require only 28MB of space, but that's 28 more megabytes than necessary if you never use them. (You would use them if you have your Mac speak text and other stuff to you and you want a variety of speakers.)
- **X11:** This option is admittedly close to our hearts and requires a meager 82MB of space. Installing it opens up your Mac to a whole world of free (*free!*) software and makes 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 don't 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 Tiger, including a few that we list in this book. This includes command line utilities and some Internet and networking software.

## 12. After you select what you want installed, click Upgrade or Install to begin the actual installation process.

The button you see depends upon the installation type you chose. You can also click Easy Install to cancel the customization.



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 to 30 minutes, depending upon your computer and the installation choices made).

## 13. Wait patiently as the installation happens.

The installation process could easily take upwards of an hour, so you may want to grab a good book while you're waiting.



The first step that the installer takes is to check for problems on the installation disc. Then it checks 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 installation process stops because there's a problem with the integrity of your hard drive (you see an obvious error indicating such), you need to repair the hard drive before installing Tiger. To do so, reboot your computer from the Tiger installation disc, then choose Utilities ⇨ Disk Utility. The Repair option is under the First Aid tab.

## 14. When the installation finishes, your computer automatically restarts.

You can also click Restart at the prompt.

## 15. If necessary, follow the on-screen instructions to insert discs 2 and 3.

After your computer reboots — and is therefore running off the new OS on your hard drive — 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, the installer prompts you for disc 2; if you elected to install X11, disc 3 is required. Obviously, if you're using the single DVD, you don't need to insert anything else.





You can also use the installer CDs 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 Hard Drives”). Each of these is accessible through the Installer menu.

## Working with Setup Assistant

If you perform an Erase and Install installation of Tiger 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 country.

### 2. Answer the Do You Already Have a Mac? question.

This new feature makes it easier to transfer all your existing information from your old Mac to your new one. The three options are

- ▶ **Yes, Transfer My Information from Another Mac:** This is useful only if you have another Mac, they both have a FireWire connection, and you have a FireWire cable. If you have all three requirements, this is most assuredly the way to go.
- ▶ **Yes, Transfer My Information from Another Partition on This Mac:** If you performed a clean installation of Tiger on another partition or drive on the same computer, you can easily move all your personal stuff over.



A very quick and reliable way to install Tiger is to place the operating system on a separate partition and then use the transfer feature to copy over the data from the previous, existing partition.

- ▶ **No, Do Not Transfer My Information:** Even if you choose this option, you can move stuff over manually later. See “Transferring Files Flawlessly” at the end of this technique.

If you select either of the first two options, the Setup Assistant then instructs you on what you should do.

### 3. Select your keyboard layout.

For this and for Step 1, the defaults will most likely work. Apple is kind enough not to display all the options, but you can get them by clicking the check box at the bottom of the window.

### 4. 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](http://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.

### 5. If you want, register.

Unlike Windows XP, which requires activation of the operating system, you can forgo Tiger registration entirely. If you don't feel like registering, press ⌘-Q to quit the registration application. The Setup Assistant then gives you the option to skip registration entirely (and continue with setup process), shut down the computer, or cancel.

## 6. Answer a few more questions and then check out Apple's Privacy Policy.

## 7. Create your user account.

To create your account, enter your full name, your 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.

## 8. Select your Internet access type and then click Continue.

You have three options:

- ▶ Set Up a Free Trial Account with EarthLink
- ▶ Use My Existing Internet Service
- ▶ I'm Not Ready to Connect to the Internet

## 9. 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 8, 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)
- ▶ Username
- ▶ 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.

## 10. Set up Mail.

Depending upon what choices you've made thus far, you might also be able to set up your Mail accounts at this time. Doing so is just a matter of using the provided form. You can always do this in the Mail application later, as well.

## 11. Sync your Mac.

A few items can be synced across multiple Macs. If this is something you've used before, you can immediately sync your new Mac with this old data by following the prompts.

## 12. Select your time zone, confirm the current date and time, and start using Tiger!

# Transferring Files Flawlessly

In Technique 16, we discuss how to organize and maintain your files and folders. Tiger 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](http://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!