# **Take Control** Users & Accounts in Tiger

## by Kirk McElhearn

#### Table of Contents (Version 1.0)

Read Me First	ii
Introduction	1
Working with Accounts Quick Start	2
About User Accounts	3
Types of Accounts	7
Choose an Account Strategy	15
Create and Delete Accounts	19
Log In to and Out of Accounts	29
Fast User Switching	33
Manage Login and Startup Items	38
Troubleshoot Startup and Login Items	44
Troubleshoot Preference Files	48
Share Files among Users	51
Resources	60
Appendix A: Share Digital Media Files	A-1

#### Help a Friend Take Control!

Click Here to Receive a Discount Coupon for You and Your Friend

> **Check for Updates** Click Here to Look for Updates to This Ebook





## **READ ME FIRST**

Welcome to Take Control of Users & Accounts in Tiger, version 1.0.

This ebook tells you everything you need to know about users and accounts in Tiger, how to set them up, configure them, and manage them. This ebook was written by Kirk McElhearn, edited by Tonya Engst, and published by TidBITS Electronic Publishing.

You can contact TidBITS Electronic Publishing by sending email to tc-comments@tidbits.com and view the Take Control Web site and catalog at http://www.takecontrolbooks.com/. You can read About This Ebook to learn about the author, the publisher, and the Take Control series. The title page contains copyright and legal info.

The price of this ebook is \$5. If you want to share it with a friend, please do so as you would with a physical book, meaning that if your friend uses it regularly, your friend should buy a copy. The Help a Friend button on the cover makes it easy for you to give your friend a discount coupon.

We may offer free minor updates to this ebook. Click the Check for Updates button on the cover to access a Web page that informs you of any available or upcoming updates. On that page, you can also sign up to be notified about updates via email.

**WARNING!** If you use Adobe Acrobat Pro 6 or 7, make sure your Web Capture preference is set to view Web URLs in a Web browser before checking for updates. To do so, choose Acrobat > Preferences, switch to the Web Capture pane, and choose In Web Browser from the Open Web Links pop-up menu.

## **Onscreen Reading Tips**

We carefully designed the Take Control ebooks to be read onscreen, and although most of what you need to know is obvious, note the following for the best possible onscreen reading experience:

• Blue text indicates links. You can click any item in the Table of Contents to jump to that section. Cross-references are also links, as are URLs and email addresses.

- Work with the Bookmarks tab or drawer showing so that you can always jump to any main topic by clicking its bookmark.
- Find more tips at http://www.takecontrolbooks.com/faq.html reading1.

## **Printing Tips**

Although our layout is aimed at making online reading an enjoyable experience, we've made sure that printing remains a reasonable option. Please review these tips before you print:

- Use the Check for Updates button on the cover to make sure you have the latest version of the ebook and to verify that we don't plan to release a new version shortly. If you want to commit this ebook to paper, it makes sense to print the latest possible version.
- Don't throw out your PDF after you print! You must click the Check for Updates button on the cover to get future updates. The link *must* be accessed from the cover of your PDF.
- For a tighter layout that uses fewer pages, check your printer options for a 2-up feature that prints two pages on one piece of paper. For instance, your Print dialog may have an unlabeled pop-up menu that offers a Layout option; choose Layout, and then choose 2 from the Pages per Sheet pop-up menu. You may also wish to choose Single Hairline from the Border menu.
- When printing on a color inkjet printer, to avoid using a lot of color ink (primarily on the yellow boxes we use for tips and figures), look for an option to print entirely in black-and-white.
- In the unlikely event that Adobe Acrobat or Adobe Reader can't successfully print this PDF, try Preview; several readers have solved printing problems by using Preview.

## **Basics**

In reading this ebook, you may get stuck if you don't know certain basic facts or if you don't understand Take Control syntax for things like working with menus or finding items in the Finder. Please note the following:

• **Path syntax:** I occasionally use a *path* to show the location of a file or folder in your file system. Path text is formatted in bold type.

For example, Tiger stores most utilities, such as Disk Utility, in the Utilities folder. The path to Disk Utility is: /Applications/Utilities/Disk Utility.

The slash at the start of the path tells you to start from the root level of the disk. You will also encounter paths that begin with ~ (tilde), which is a shortcut for any user's home directory. For example, if a person with the user name joe wants to install fonts that only he can access, he would install them in his ~/Library/ Fonts folder, which is just another way of writing /Users/joe/ Library/Fonts.

- **Menus:** When I describe choosing a command from a menu in the menu bar, I use an abbreviated description. For example, the abbreviated description for the menu command that displays information about a file is "File > Get Info."
- **Finding preference panes:** I sometimes refers to Mac OS X preferences that you may want to adjust. To change these system-wide settings, open System Preferences by clicking its icon in the Dock or choosing System Preferences from the Apple menu. You access a particular preference pane by way of its icon, or the View menu. For example, to see "the Accounts preference pane," you would launch System Preferences and then click the Accounts icon or choose View > Accounts.

#### **INTRODUCTION**

Apple has done an excellent job of hiding many of Mac OS X's Unix underpinnings, so Unix-related features such as preemptive multitasking make the Mac work better than ever before, without drawing attention to themselves. But other aspects of that Unix foundation do affect the way we work in important and noticeable ways; for example, Unix brings a full multi-user operating system to OS X, which means that each person who wishes to use the Mac must use it while logged into an account.

This ebook goes much further than just telling you how to set up and configure user accounts. I cover the different types of accounts, how to limit the capabilities of certain accounts, and what you need to know about Fast User Switching. I also explain why you should have at least two accounts even if no one else uses your Mac.

By the end of this ebook you'll be able to take control of all your Tiger accounts—whether you have one or dozens—and work more efficient-ly with Tiger.

## WORKING WITH ACCOUNTS QUICK START

User accounts affect almost everything you do under Mac OS X. You must have at least one account, and, if you need to create additional accounts, you can do so easily. Here's an overview of how you can use this ebook to work with accounts in Tiger:

#### Learn about accounts:

- Learn what user accounts are, and why you need them. Read About User Accounts.
- Discover what has changed with accounts from Panther to Tiger. See What's New in Tiger.
- Find out about five types of user accounts in Types of Accounts.
- Learn strategies for setting up accounts for situations that you may not have previously considered, such as for troubleshooting or visitors. Read Choose an Account Strategy.

#### Create and delete accounts:

- Set up and configure a new account. See Set Up an Account.
- Delete accounts when you need to. Read Delete an Account.
- If desired, Activate the Root Account.

#### Work with accounts:

- Log in and out of your account, plus customize options to simplify or secure the login process. See Log In to and Out of Accounts.
- Use Fast User Switching to share your Mac more efficiently.
- Add and remove login items. Read Manage Login and Startup Items.
- Use your knowledge of login and startup items to perform basic troubleshooting. See Troubleshoot Startup and Login Items.

#### Share files among users:

- Choose from one of four methods for sharing files among users on the same Mac, and set one up. See Share Files among Users.
- Share music and photos. Find out how in Appendix A: Share Digital Media Files.

## **ABOUT USER ACCOUNTS**

User accounts are at the heart of any Unix-based operating system, including Mac OS X. The entire system relies on this concept, so having a basic understanding of what accounts are and why you need them will help you better comprehend and use Mac OS X.

Since Unix-based operating systems rely on the concepts of *permissions* and *ownership*, each file, folder, and application must belong to a specific user. For this to be the case, users must be declared and identified; hence the idea of creating unique *accounts* for each user, much as every customer of a bank has a private account that no one else can access.

When you set up or receive an account on Mac OS X, you become a *user* of that computer, and you are assigned a *home* folder (the folder with your name and the house icon). Your home folder is the receptacle for your personal files, and, under Mac OS X, it contains a number of sub-folders that help you further organize your files.

Because your files belong to you, other users cannot access files contained in the sub-folders of your home folder; this is also true in the other direction: you cannot access files in other users' folders. To help users on the same Mac share files, each home folder contains a Public folder, from which any user can copy files, and this folder contains a Drop Box folder, into which any user can copy files.

This multi-user focus is quite different from earlier versions of the classic Mac OS, which generally assumed that any user of the computer could access all its files. You could set up multiple users for file sharing over a network, but for the most part, you couldn't limit what other users of the same computer could do. In particular, you could put files anyplace on the computer, and anyone could access them when they started working on the Mac.

In addition to segregating files among users, Unix-based operating systems prohibit standard users from accessing, changing, or deleting essential system files. This prevents standard users from damaging the operating system. Administrators, however, can access all files on a computer. I talk more about this distinction later in Types of Accounts.

#### **NOTE WHAT ARE PERMISSIONS?**

*Permissions* are special bits in files and folders that tell your Mac who owns a file; what rights they have: read (view a file, open a folder, or access an application), write (view a file and save changes, or create new files in a folder), execute (launch a program); and what others can do with the item. The term *privileges* means the same thing as permissions.

#### **Working with Accounts**

When you log in to your Mac, and create files with an application, these files adopt the ownership and permissions for your account. They are flagged as being your files, and other users cannot access them. (I tell you how to make files available to others later in Share Files among Users.)

In addition, when you log in to your Mac, Mac OS X and applications use the preference files in your home folder, so you work with the specific settings you chose. (You don't have to look at that ugly green Desktop background that someone else likes, and you don't have to change the display of your email program each time you open it.)

Even if you're the only person who uses your Mac, you must still have an account. And if others in your family or office share your Mac, you can easily set up accounts for them and enjoy numerous advantages:

- Users don't have to (and can't) see each other's files.
- Standard users cannot access essential system files and cannot damage the operating system.
- Users can have individual preferences, ranging from Desktop backgrounds to Web browser bookmarks.
- Users don't have to worry about others checking or reading their private email messages.
- You can set limitations on what users can access in the Finder and system; for example, you can set a child's account so she sees only a Simple Finder, or other accounts so their users can use only certain applications.

• You can use parental controls for some Apple applications—Mail, iChat, Safari, and Dictionary—in order to restrict who a user can communicate with, which Web pages a user can visit, and which words a user can look up.

## What's New in Tiger

If you've worked with accounts in Mac OS X 10.3 Panther, you'll find some changes in the way Tiger lets you configure accounts:

- Options that you previously set in Panther in the Accounts system preferences, on the Security pane, have been moved to the Security preference pane.
- Startup items are once again called login items. (See sidebar Login Items and Startup Items, on the next page, for more on this terminology.)
- A new pane, Parental Controls, in Accounts system preferences, replaces the Limitations pane that was visible only when you selected non-administrator accounts in Panther. It is now present for all accounts, though if you click it when an administrator's account is selected, you'll see nothing more than a message telling you that you cannot turn on parental controls for that account.
- Panther distinguished between *managed accounts* and *simplified accounts*. The difference between the two was that simplified accounts could only access a Simple Finder, whereas a managed account was one for which some limitations were set. In Tiger, both of these accounts types are called managed accounts. Types of Accounts explains the accounts types and the Simple Finder.
- Application-specific limitations: Panther limited you to Finder and System limitations; you could choose Simple Finder, limit access to specific applications, and disallow access to certain settings. Now, Tiger goes further by offering controls for certain Apple applications. Read <u>Set Parental Controls</u> to learn more.
- The login window can now be configured to allow you to change keyboard layouts or to work with the VoiceOver, a utility that speaks the interface. See Customize the Login Window.

#### SIDEBAR LOGIN ITEMS AND STARTUP ITEMS

Over time, Apple has shifted the terminology for these items, much to the annoyance of many long-time Mac users.

- Jaguar (Mac OS X 10.2): Under Jaguar, *login items* were applications, documents, or folders that became active, launched, or opened when you logged into your account. Along with login items, Jaguar provided *startup items*—low-level programs that activate when the Mac starts up. These startup items, which remained in Panther, are like the extensions of the classic Mac OS, and affect the Mac as a whole, no matter which user is logged in.
- **Panther (Mac OS X 10.3):** In Panther, Apple began calling both of these "startup items."
- **Tiger (Mac OS X 10.4):** Finally, in Tiger, Apple has gone back to the Jaguar method, and has allowed logic to rule terminology—items users can set in the Accounts preference pane are login items (see Set Login Items). In contrast, items that affect the entire Mac are *startup items* (see Manage Startup Items).

## **TYPES OF ACCOUNTS**

Tiger offers three normal types of accounts: administrator accounts, standard accounts, and managed accounts. (A special fourth type of account, called root, is not accessible from the Accounts preference pane.)

You can see the types of accounts set up on your Macintosh by viewing the Accounts pane in System Preferences, as shown in **Figure 1**. (To open System Preferences, choose it from the Apple menu or click its icon in the Dock.)



Before you start creating new accounts, you need to understand these different account types, what rights each one has, and how you would use each type. **Table 1** (next page) summarizes the powers and limitations of these accounts, **Table 2** helps you quickly match different types of users to the different types of accounts, and the rest of this section explains the account types in more detail.

#### **NOTE** Technically speaking, managed accounts are merely a variant of standard accounts, but I follow the example of the Accounts preference pane which uses both terms in its interface.

Table 1: Ov	Table 1: Overview of What Account Owners Can Do		
Account Type	Account Owner Can	Account Owner Cannot	
Root	• Do anything.	<ul> <li>Be sure his actions won't be serious mistakes.</li> </ul>	
Administrator	<ul> <li>Create and delete other accounts.</li> <li>Install any software.</li> <li>Change permissions on files and folders.</li> <li>Access secure system preferences.</li> <li>Add fonts for all users.</li> <li>Access mounted volumes on remote Macs where he has an account.</li> <li>Create folders in locations other than his home folder.</li> <li>Run certain utilities.</li> <li>Access, change, or delete any file.</li> <li>Run the sudo command in Terminal.</li> </ul>	• Be sure that his actions won't be serious mistakes.	
Standard	<ul> <li>Access files in her home folder or its subfolders.</li> <li>Access other users' public folders.</li> <li>Access folders on shared volumes.</li> <li>Change settings in non-secure system preferences.</li> <li>Install software for personal use.</li> </ul>	<ul> <li>Install software for all users.</li> <li>Access all files and folders.</li> <li>Change settings in secure System Preferences panes.</li> </ul>	
Managed	<ul> <li>Do everything that standard accounts can do, except for limits applied by the administrator, called <i>parental controls</i>.</li> <li>Access only a simplified Finder, if the administrator chooses this in the Parental Controls pane.</li> </ul>	<ul> <li>Make changes to certain settings, according to the parental controls applied.</li> <li>Access applications that the administrator has not allowed.</li> <li>Access unapproved Web sites, exchange email or chat with unapproved people.</li> </ul>	

**NOTE** Panther distinguished between *managed accounts* and *simplified accounts*. In Tiger, both of these types of accounts are called managed accounts. The difference between the two was that simplified accounts could only access a Simple Finder (see later in Simplified Account for more on the Simple Finder), whereas a managed account was one for which there were some limitations set.

Table 2: How to Match Account Types to User Types		
Account Type	Works Well For	
Root	A super-user who needs access to <i>every</i> file and <i>every</i> program and service on the Mac.	
Administrator	The person who manages the Macintosh by installing software, creating user accounts, and solving problems when things go wrong.	
Standard	Everyday users who need to access files in a home folder, run software, create documents, and share files with other users on the Mac.	
Managed	Users whose access should be restricted, either to prevent harm to the system or to limit what they can do with the computer. For instance, a managed user might have a special, limited Dock or be unable to receive email from unapproved correspondents.	

## **Administrator Account**

An *administrator* is, in the Unix world, a person who manages a computer or a group of computers. Administrators have accounts that give them the power to make system-wide changes, create, manage, and delete user accounts, and change settings that normal users can't access. In Tiger, administrators have all these rights and more.

After you first install Mac OS X, or when you first turn on a new Mac, the Mac OS X Setup Assistant greets you and walks you through the setup process. You may not realize it, but when this assistant asks for a user name and password to create your first account, it sets up an account for you with administrator status.

This makes sense, because if you are the only user on your Mac you *must* be its administrator; if not, you won't be able to access all its

settings, install software, or perform other administrative tasks required to maintain your Mac.

In addition to accessing her own files (which is true of all account types), an administrator can do the following:

- Create, manage, and delete user accounts.
- Change permissions for files and folders.
- Access secure parts of System Preferences, and make changes that affect global system operations.
- Install all software using the Apple Installer or third-party installers. (Some programs don't require authentication for installation and others can be installed by simply copying them to any folder.)
- Add fonts to the /Library/Fonts folder, to provide system-wide access. (A standard user can add fonts to his ~/Library/Fonts folder, so he can use these fonts, but other users can't use them, unless they install them in their own ~/Library/Fonts folders.)
- Create new folders in locations on the startup volume other than inside her home folder.
- Access mounted remote volumes on a Mac where she has an administrator account. Non-administrators can access only their home folders and other users' Public folders, but users with administrator accounts on the Mac they connect to can also access any mounted volumes: internal or external hard disks, mounted network volumes, and even an iDisk mounted on another Mac.
- Access certain system-level utilities, such as NetInfo Manager and Directory Access. (See the sidebar on the next page for details.)
- Access, change, or delete *any* files on the Mac. If you want to access, change, or delete files in the System or Library folders you are prompted to authenticate, and you can enter your administrator password to carry out the task. This approach has pros and cons. It's great to be able to access restricted files and folders without dropping into Terminal and using the command line, but since the first account on any Mac is an administrator account, this gives many people the power to make potentially damaging mistakes.

#### SIDEBAR RANT: STANDARD USERS CAN USE DISK UTILITY

I remain amazed that any user can use Disk Utility, which is powerful and dangerous since you can use it to erase any disks other than the startup disk. In Jaguar, only administrators could use Disk Utility. But from Panther onward, Apple decided to roll the functions previously in Disk Copy (which lets you create and work with disk images) into Disk Utility, requiring that it be accessible to standard users. I find it surprising that Apple allows any user to access Disk Utility without even requiring authentication for Disk Utility's more dangerous functions, such as erasing, partitioning, and reformatting disks. If you manage Macs in a school, company, or lab setting, I recommend that you prevent users from accessing Disk Utility. (I explain how to do this later, in <u>Set Parental Controls.</u>) Otherwise you risk having a bored student or disgruntled employee figure out how to wreak havoc with Disk Utility.

## **Standard Account**

As I discussed just earlier, administrators have virtually unlimited power in working with a Mac. In contrast, standard users have far less power. However, a standard user can:

- Access any files in his home folder or its sub-folders, creating new files and deleting others, and creating new folders at any location within his home folder.
- Access the Mac's Shared folder, as well as the Public folders of any other users on the same Mac, and copy files from these folders to his own home folder. He can also copy files to the Drop Box folders inside other users' Public folders.
- Copy files to and from, as well as create folders on, shared volumes where permissions have been ignored. (See Share Files via a Shared Volume for more on ignoring permissions on a volume.)
- Change settings in non-secure panes in System Preferences such as Appearance, Desktop & Screen Saver, Dock, Dashboard & Exposé, Sound, and .Mac. He cannot, however, change preferences that affect the overall system, such as those in Network, Sharing, or Startup Disk.

**NOTE** It may not always seem that way, but there is a logic to Apple's use of preference panes that present some protected functions that are accessible only to administrators and some unprotected functions that can be changed by any user. Take the Print & Fax preference pane: standard users can change the default printer and paper size, set up printers, and turn on faxing, but they cannot change any settings on the Sharing tab, since these settings affect the entire computer. The Security pane is another example; standard users can adjust FileVault settings, but they cannot make changes in the bottom part of the Security pane that affect all accounts on the computer. Rather than split such related functions among several preference panes, Apple grouped them and limited access to aspects that impact the computer as a whole.

## **Managed Account**

When you set limits to a standard user's account, the account becomes a *managed account*, as shown in **Figure 2**. Limits may be minor, such as not allowing the user to burn CDs or DVDs, or more wide-ranging, such as limiting the user's access to certain programs.

You set limits (which Tiger calls *parental controls*), in the Parental Controls pane of the Accounts system preferences. A big change in Tiger, as far as user accounts is concerned, is the new capability to limit certain aspects of using Mail, iChat, Safari, and Dictionary (**Figure 2**, next page).

## **Simplified Account**

Even though Tiger no longer uses the term "simplified account," I think it's useful to keep this name for an account that is set to use only Simple Finder. An account with this type of parental control has a different interface and very different rights from other managed accounts.



With Simple Finder running, as shown in **Figure 3** (next page), the user sees only a minimal Dock and can access only applications in the My Applications folder in the Dock. (When you set up the account, you can choose which applications she can use.) This is the best way to set up a user account for a young child.

If an administrator, needs to access files or perform other operations when a user is running Simple Finder, he can choose Finder > Run Full Finder, then authenticating. This switches the interface to the normal Finder, with the exception of the Dock, which remains as shown in **Figure 3** (next page). This allows the administrator to copy



files, for example, from a shared volume to the user's Documents folder. Choosing Finder > Return to Simple Finder switches back to the minimal Finder access.

#### **Root Account**

The *root account* is a special superuser account available on all Unixbased systems. The root user has the ultimate power to access and change any files, or to perform any operations on the system without authenticating. The root account is authorized to do *anything*.

You do not access or configure the root account in the Accounts preference pane; the root user account exists automatically on Mac OS X. See Activate the Root Account to learn more about using the root account.

## **CHOOSE AN ACCOUNT STRATEGY**

The number of accounts you set up depends not only on how many users you have, but how you want to work with your Mac. Here's how I recommend setting up accounts for several different scenarios.

## Single User Mac

Even if you're the only person who uses your Mac, I recommend that you create one or two additional accounts for security and troubleshooting.

#### Set up a standard account for everyday work

If you work alone on your Mac, consider setting up a standard account that you'll use under almost all circumstances. This may seem strange, since only administrators can install software or change certain preferences. But if you need to do these tasks, you *always* have the option of authenticating as an administrator by entering the user name and password of an administrator account, even while you are logged into your standard account.

This technique provides extra peace of mind, since it's almost impossible to damage your system as a standard user if you work like this (though if you authenticate as an administrator you have the added power to screw things up). I think that the peace of mind is more important than the potential annoyances, such as an increased number of authentication requests and having to log in to your administrator account to create folders outside of your home folder.

#### NOTE HOW TO AUTHENTICATE

*Authenticate,* a rather fancy sounding term, simply means "enter your user name and/or password." The login window, which appears when you log in to your Mac, is an authentication request. You'll see an authentication dialog if you try to access, change, or delete certain files, or perform other tasks, such as installing some software.

#### Set up a troubleshooting account

Whether or not you decide to use a standard account for everyday work, you should create a second administrator account. If something goes wrong with your everyday account, you can log in with the troubleshooting account to see if the problem recurs. If the problem disappears when you're logged in with your troubleshooting account, you can be pretty sure that your problem has something to do with software or preferences that affect only your main account. See Troubleshoot Startup and Login Items and Troubleshoot Preference Files for information about using your troubleshooting account.

#### Set up a guest account

You may want to set up a standard account for guests, so friends or family who need to use your Mac for "just a few minutes" can do so without accessing your files or changing your settings. A guest can use your software, such as a Web browser, but won't be able to access your email or bookmarks.

**NOTE** If you are a developer, or work with software as a beta tester, you might want to create a special administrator or standard account (depending on the capabilities you need) for testing. Using a testing account protects your main account from corruption, and when you finish testing, you can just delete the account. You can also be sure that your testing account is a virgin account with no changes made from the default installation. With Fast User Switching (discussed in Fast User Switching) you can quickly switch to your testing account when you need to.

#### **Multi-User Mac at Home**

If you share your Mac with your family, you may or may not find it useful to have individual accounts for each user. Some families find that sharing a single account makes it easier to work at home. Each user has access to the same files, such as photos, bookmarks, and music files, so there's no need to worry about sharing files among users. If you share your a Mac with just one other person, relying on a single account may be the easiest approach.

However, here are some reasons for setting up individual accounts:

- **Privacy:** You can't see each other's files, email accounts remain separate, and everyone's settings and preferences stay independent. If any of your users want privacy—and any parent of a teenager knows this is essential—you should create separate accounts.
- **Peace of mind/ease of use:** If you don't want to give a user such as a young child—full run of your Mac, you should create an account for her. Using a managed or simplified account not only protects your Mac from mistakes, but can also be less overwhelming for children.
- **Restricting unapproved content**: You can set parental controls for children who use your Macintosh, protecting them from undesired content, and preventing them from chatting or emailing with unapproved people.
- **Remote troubleshooting:** If the friend or relative who acts as a troubleshooting guru isn't often in your home, you can set him up with his own administrator account. This enables him to connect to your Mac remotely over the Internet to perform some trouble-shooting tasks, even if he is far away. He could connect remotely using the command line via ssh or using remote-control software described in the tip, next.
- **TIP** Using ssh requires Unix skills, and connecting to a Mac via ssh does not provide full access to Mac OS X. A better way of enabling remote troubleshooting for your far-away guru is to install remote-control software like Netopia's Timbuktu Pro (\$150 for a twin-pack), which lets someone work on your Mac just as though that person was sitting in front of it. For decent results, you need a high-speed Internet connection (http://www.netopia.com/software/products/tb2/). Another possibility is to use a VNC client (such as Chicken of the VNC; http://sourceforge.net/projects/cotvnc/), which provides similar functions for free. If you do this, you'll need to turn on Apple Remote Desktop selected, click Access Privileges, and check VNC Viewers May Control Screen with Password. Enter a password, and you'll then be able to connect to the Mac and control it remotely.

**TIP** If you use your Mac to share files with remote users who might log in from either the same network or via the Internet, adding an account that covers all of them (in some situations) or providing individual accounts for each of them may be a big time saver. Turning on and administering file sharing is a huge topic worthy of its own Take Control ebook; check out Glenn Fleishman's *Take Control of Sharing Files in Tiger* for the details.

http://www.takecontrolbooks.com/tiger-sharing.html

## **Multi-User Mac in an Office or School**

If you share a Mac with other users in a public setting such as a school or office, I strongly recommend that the machine be set up with a standard, managed, or simplified account for each user. The administrator should create and manage these accounts, setting limitations as appropriate for each user.

The primary administrator should also create a second, backup administrator account that could be used when she is unavailable. Remember, only administrators can install software for all users and updates to Mac OS X, so it's important that someone be able to do this when required, even if the administrator is on vacation.

## **CREATE AND DELETE ACCOUNTS**

If you've read this far, you've learned about the four types of accounts (see Types of Accounts, earlier) and you've seen my recommendations for setting up accounts on your Mac, so you're in good shape for creating additional accounts and for deleting unnecessary accounts.

**NOTE** Although you can create accounts from the command line, I don't recommend it for typical readers of this ebook because it is more complex than using System Preferences and more prone to problems. However, I do explain how in my book *The Mac OS X Command Line: Unix Under the Hood.* http://www.mcelhearn.com/unix.html

## Set Up an Account

Follow these steps to create an account:

 In System Preferences, click the Accounts icon, then click the lock icon and enter your administrator's user name and password to authenticate. Click the + (plus) button beneath the account list. (To open System Preferences, choose it from the Apple menu or from the Dock.)

A dialog appears, with the insertion point in the Name field.

- 2. Enter a name for your user. The Name field holds the user's long name, or full name. (The user's *long name* is his real name; the *short name* is used for the name of his home folder, and need not relate to the long name.)
- 3. Enter a short name in the Short Name field. By default, Mac OS X enters your user's long name without spaces in lowercase. You do not have to keep this default name; in fact, the point of having a short name is that it is, well, short. You can't change the short name later—at least not easily—so make sure you choose the right short name now. It could be the user's first name, a nickname, or anything else you choose.
- 4. Enter a password, enter it again in the Verify field, and enter a hint if you want. The hint displays if the user types an incorrect password in the login window three times.

- **TIP** If you want to use Fast User Switching, which I discuss later, and avoid entering a password each time you switch users, you can set blank passwords for your users. Normally, Fast User Switching requires that a user enter a password to switch to her account, but if a user account has a blank password, you can switch to it immediately, bypassing the login window. If you're setting up accounts for family members, and you're unconcerned about security, I recommend that you create accounts with blank passwords; just leave the Password and Verify fields blank when you set up their accounts. Tiger warns you of the security risk when you do this.
  - 5. To turn the account into an administrator account, check Allow User to Administer This Computer. (You can also make this change at any time from the Password pane of any user's account.)
  - 6. Click Create Account to add the new account to the accounts list.
  - 7. Click the Picture tab and choose a picture from the Apple Pictures, or drag a picture file from a Finder window, or from the Desktop, into the Picture box. You can use most types of graphics files, including JPEG, GIF, TIFF, PNG, and PDF; and you can take a video snapshot if you have a digital video camera.
- **TIP** To use a photo from iPhoto, first drag it from iPhoto to the Desktop, then from the Desktop into the Picture box, where you must adjust the slider to get the right part of the photo to fit.
  - 8. To turn on parental controls, and make this account into a managed account, click the Parental Controls tab. See <u>Set Parental</u> <u>Controls</u>, ahead, for information on configuring the different limitations.

The Accounts preference pane lacks a Save button; it records changes as you make them and applies them when you close the preference pane or click another tab or another user name in the account list. There's also no Cancel button, so if you decide you don't want to apply your changes you must undo them manually. **TIP** Several readers have asked how to change the short user name of an account. Although you can't change the short user name from the Accounts preference pane, it can be done, and it is a complex procedure—a technical article from Apple (see http://docs.info.apple.com/article.html?artnum=106824) describes the technique in 39 steps. Suffice it to say that I recommend following those 39 steps only to users who are very comfortable with tweaking their systems, and who have backed up their data. Twice.

But there's another way to accomplish the desired result of changing an account's short user name. Start by creating a new account with the desired short user name. Copy the contents of the existing account into the **/Users/Shared** folder. Log out, then log in to the new account and replace the contents of the new account's home folder with the folders you placed in the Shared folder. Log out and log in again so Mac OS X reads the new user preference files that you just copied from **/Users/Shared**.

## **Set Parental Controls**

Now that you've set up an account, you may wish to limit what the account owner can do. In this section, I explain how to configure the Parental Controls pane, in the Accounts system preferences.

**TIP** Don't worry if you aren't sure exactly how you want to set up these controls at first. You can go back and modify them later.

#### **Finder & System controls**

Finder & System is not the first item in the Parental Controls list, but I look at it first, since it determines whether the account is managed or simplified. Follow these steps:

- 1. Check Finder & System and click Configure:
  - **To create a managed account:** First, select the Some Limits radio button. Then, check any desired checkboxes. In particular, to allow the user to access only specific applications, check This User Can Only Use These Applications, and provide access to a program by checking its Allow checkbox. (View the contents of a

listed folder by clicking its expansion triangle.) To give access to an unlisted program, click Locate, then navigate to find it. Click Add to add it to the Others section and grant access (**Figure 4**).



The Allow Supporting Programs checkbox is important—if you check it, a program that you have allowed can cause another program (that you have not allowed) to open. This is important for some programs, since they call on "hidden" programs that run in the background, or they may need to launch special processes to support their functions. However, checking this option has a downside: read the sidebar Application Limits Don't Always Work for more info. • **To create a simplified account:** Select the Simple Finder radio button. Then, provide access to a program by checking its Allow checkbox. (View the contents of a listed folder by clicking its expansion triangle.) To give access to an unlisted program, click Locate, then navigate to find it. Click Add to add it to the Others section and grant access (**Figure 5**).

 "Samuel Pepys" needs:	Finder to a user, you car
Some Limits Simple Finder Simple Finder is easier to use and limits access to applications. Users can't change the Dock and can open only the applications in the My Applications folder.	set which applications the user can access. By default, all applications
Allow Applications	are inaccessible. Click
<ul> <li>Applications</li> <li>Utilities</li> <li>Applications (Mac OS 9)</li> <li>Others</li> </ul>	show the contents of a folder or of the Others category, and then check an application's checkbox to allow access.
Allow All Uncheck All Locate	
Cancel OK	

- 2. Click OK to save your changes.
- **TIP** When you set up a simplified account, the applications you select in the Simple Finder section show up in the My Applications folder on the user's Dock. You can see how they look in **Figure 3**.

#### SIDEBAR APPLICATION LIMITS DON'T ALWAYS WORK

When setting up a managed account, if you check This User Can Only Use These Applications, the user is initially allowed to use the programs in either Applications folder, but no utilities in the Utilities folder. This is one way to prevent users from fiddling with Disk Utility, which can be dangerous, as I mentioned earlier in the sidebar Rant: Standard Users Can Use Disk Utility.

However, blocking access to individual programs does not offer ironclad protection. Although it prevents users from opening applications by double-clicking them, if you check Allow Supporting Programs, *other* applications can still cause blocked applications to open.

Here's an example. If you don't allow a user to run Safari, yet you check Allow Supporting Programs, other programs will be able to launch Safari. Safari could launch, for instance, if a user ran iTunes and clicked a Web link in the iTunes Music Store.

To fully protect access to certain software, but still allow supporting programs to run (which you may need to do, especially for games), you must do some sleight of hand. First, log in as an administrator. Then, in the Finder, select the application you want to block and choose File > Get Info (Command-I). In the Info window, open Ownership & Permissions and open Details. Click the lock next to Owner, and change the owner to your user name. You may need to authenticate. From the Others pop-up menu, choose No Access. Finally, close the Info window.

Now, only your account can access the selected application. You can always go back and change the owner to System again, giving Others Read & Read Only access. And, in fact, if you change permissions in this manner for an Apple application, you *must* reset the permissions to their original values before running any system updates. If not, they might not update correctly. If you don't want to return to the Info window, perhaps because you changed several Apple applications and it would be repetitive to change each one in the Info window, you can reset the permissions by repairing permissions with Disk Utility.

#### Mail controls

To set limitations for Mail, check Mail and click Configure to open a dialog where you can add email addresses with which the user can exchange email (**Figure 6**). This works as a *whitelist*; the user can send email only to and receive messages only from addresses in the list.

	Person
	henrythoreau@mac.com
	Send permission emails to:
	kirkmc@mac.com
	(Cancel) OK

#### iChat controls

Just as you can set up a whitelist with Mail, you can set up an iChat whitelist, thus controlling who your user can contact by iChat. (However, you can't control the type of chats he can have with iChat, such as audio and video chats, nor can you block him from sending or receiving files or graphics.)

Check the iChat box; then click Configure. To add a contact to the list, click the + (plus) button. This opens a Buddies dialog where you can

add known buddies by selecting them and clicking Select Buddy, or where you can add unknown buddies by clicking New Person.

#### Safari controls

Similar to the types of whitelists you can set up for Mail and iChat, you can set up a whitelist of Web sites that your user can access with Safari. Here are the steps:

- 1. Check the box next to Safari, and click Configure. You'll see a dialog telling you to log in as that user.
- 2. Log out. Then, log in as the user who you want to make a whitelist for. (If you know how, use Fast User Switching do this quickly.)
- 3. Launch Safari.
- 4. Try to visit a Web site that you want to add. Safari will display a page saying that it is limited by parental controls.
- 5. Click Add Website to add the URL to the bookmarks bar; then enter your administrator user name and password and click OK.
- 6. Edit the bookmark name, if you like; then click Add to add it to the bookmarks bar. (You can add bookmarks only to the bookmarks bar, not to the bookmarks menu; when Safari is set up with parental controls, the bookmarks menu is unavailable.)

TIP You may want to remove the default bookmarks that Apple includes in the bookmarks bar: these include Amazon.com, eBay, Yahoo, and several news sites. To do this, hold down the Command key and drag a bookmark off the bar. You'll be prompted to authenticate.
You can also manage bookmarks by clicking the Show All Bookmarks button at the left of the bookmarks bar (it looks like padlock nesting inside a book). Safari will prompt you for authentication.

7. Log out of the managed user's account and return to your administrator's account.

**NOTE** In the Parental Controls pane, the Configure button for Safari is bogus; even after you add URLs to the user's bookmarks bar, you can still make changes only by logging into the account.

#### **Dictionary controls**

To prevent a user from reading the definitions of "certain words, such as some profanity," check the Dictionary box. The user will be able to look up these words, and will see a list of the words contained in the dictionary, but will not be able to access their definitions.

**RANT** While I understand that some parents and teachers may want to isolate users from disturbing words, the futility of such a procedure is evident. Nothing prevents users from looking up such words in a paper dictionary, at home or in the library, nor from searching for their definitions on the Web. Further, the fact that Dictionary still displays word lists (look up the most common word you can think of that should be blocked, and you'll see it together with a list of combinations containing that word), makes this protection risible at best.

#### **Delete an Account**

To delete an account, open the Accounts preference pane, select the account in the Accounts list, and click the minus (–) button at the lower left of the pane. Your Mac will display a dialog offering three options (**Figure 7**):

To de	lete the account and save th	he contents of the user's hom	ne folder,
"bach Deleti conte save t	", click OK. The user's home ed Users folder, which is in nts of the user's home fold he user's home folder, click	e folder is saved in a file in th the Users folder. To access th er, open this file. If you don't k Delete Immediately.	e 1e want to
De	lete Immediately	Cancel C	ОК

• **OK:** If you click OK, Tiger deletes the account and saves its home folder as a disk image in /**Users/Deleted Users**, so you can recover the data if you need to. (Creating the disk image may take a few minutes if the user has many files in his home folder.)

- **TIP** To recover data from a disk image, double-click it to mount it as a volume on your Desktop, then copy files from it to wherever you like. Only administrators can access the Deleted Users folder.
  - **Delete Immediately:** If you click Delete Immediately, the account and the user's home folder are both deleted immediately. Don't use Delete Immediately unless you're deleting a test account or other account that you're sure contains no data worth saving.
  - **Cancel:** If you realize that you don't want to delete the account, click Cancel to leave it as it was.

## **Activate the Root Account**

As I mentioned earlier, in Root Account, the root account exists by default in Mac OS X, but to use it you must enable it. To enable the root account, perform the following steps:

- 1. Open NetInfo Manager, which is located in the /Applications/ Utilities folder.
- 2. Choose Security > Authenticate, and enter your user name and password. Then choose Security > Enable Root User.

An alert appears, telling you to set a "non-trivial" password for the root account. Take this warning seriously; setting a simple password makes it too easy for anyone to control your Mac.

- 3. Click OK, and then enter the password you want to use; retype it to confirm, and click OK.
- 4. You may now have to authenticate by entering your administrator password.

To disable the root user account, return to NetInfo Manager and choose Security > Disable Root User. You'll be asked to authenticate, and then the root user account will be disabled. It won't be deleted though, and its password won't be erased either; you can turn it back on later by choosing Security > Enable Root User.

#### LOG IN TO AND OUT OF ACCOUNTS

If you've used Mac OS X at all, it's a good bet that you already know the basics of logging in to your account. Nevertheless, our friends upgrading from Mac OS 9 or switching from Windows may want a crash course.

## Log In to Your Account Normally

When your Mac starts up, you first see a dark gray Apple logo on a gray background with a gear beneath it. The gear turns a few times, then a blue background appears. After another few seconds, a progress window appears, with the message "Starting Mac OS X..." Finally (unless you have automatic login turned on; see Bypass the Login Window), the Mac displays the login window:

- **Default login window:** By default, the login window lists all the users who have accounts on your Mac, with their pictures followed by their full names. To log in to your account, click your name, and the login window changes to show a Password field. Enter your password, and then click Log In.
- **Custom login window:** If you customize the login window to display only a Name and Password field (see next, Customize the Login Window), you must enter your user name (either your long user name or your short name) and your password, and then click Log In.

If you make a mistake typing your password, the login window moves back and forth horizontally—as if it were shaking its head "no." Retype your password; you may have pressed a wrong key. Also, check if your keyboard's Caps Lock key is toggled on; if it is, the Password field will show the Caps Lock symbol, an up-pointing arrow over a horizontal line, at its far right.

Once you log in using either of these methods, any login items you set in the Accounts preference pane activate or open. (See later, Manage Login and Startup Items, for more on setting these.) After a few seconds (if you have many login items this can take a minute or more) you see your Desktop, and you can start working.

When you log in to your account using Fast User Switching, you see essentially the same login window. After you log in, your login items launch or open, and you see the same thing as when you log in at startup. The advantage of Fast User Switching over a normal login is that when you switch to another user, then switch back to your account, you won't need to wait for login items to load: they remain active when you switch users, as do any applications you were using before you switched. This means that you can get back to work immediately, without having to open files and applications that you were using. (See Fast User Switching for more info.)

## **Customize the Login Window**

The Accounts pane of System Preferences offers a few options for changing the way users on your Macintosh work with the login window. To modify these settings, open the Accounts preference pane and click Login Options at the bottom. Then:

- Change whether user names appear: The login window can display either a list of user names and pictures or a Name field and a Password field. The former method makes it so users need not remember their user names; the latter method is one way to be able to log in as root, as I discuss later in Log In as Root. Also, if you have a lot of accounts, it may be easier to display the Name and Password fields rather than a list of user names; users won't have to scroll through a long list to find the desired name. To change the login window display, simply select the desired Display Login Window As radio button.
- **Prevent users from restarting, sleeping, or shutting down via the login window**: Check the relevant checkbox to turn on this feature; it's mostly useful in a location where many users access the same Mac.
- Allow users to switch keyboard layouts on login: New in Tiger, this option fixes problems in previous versions of Mac OS X where users could not log in at all without first switching keyboard layouts or where, even after logging in, the keyboard layout could not be swapped, forcing users to memorize which keys, according to a keyboard layout that is not theirs, type which letters. To activate this option, check Show Input Menu in Login Window.
- Make your Mac talk when the login window appears (via VoiceOver): You can check Use VoiceOver at Login Window to have your Mac speak using the VoiceOver utility, which provides

spoken assistance, when the login window shows. For more on VoiceOver, see the Mac OS X Help.

## **Bypass the Login Window**

You can set up your Mac to log in automatically as a specific user, and if you are the only user of your Mac and not particularly concerned about security, I recommend this option. Be careful if you're in a setting where multiple users can access your computer, since whoever turns on the Mac will have access to the selected account and its files. If you have an iBook or PowerBook, you should probably keep this off. If not, anyone could pick up your computer and access your files.

To turn on automatic login, in the Accounts preference pane, click Login Options, check the Automatically Log In As checkbox, and choose the desired user from the pop-up menu. You must enter that user's password, even if you select your own account.

- **NOTE** Logging in automatically works only when the Mac starts up; if you log out and then log back in, you must select your user and type your password manually.
  - **TIP** To defeat automatic login temporarily, press the Shift key right after the Starting Mac OS X screen appears (this is the screen with the progress bar) and hold it down until you see the login window.

## Log In as Root

You probably won't ever need to log in as root, except possibly as a last resort when troubleshooting.

The root account never shows up in the login window like other accounts, so how do you log in as root? If you enable the root account, your login window looks different than the standard version: at the bottom of the list (you may need to scroll down a bit if you have more than a handful of users), you'll see an Other icon. Click Other to display Name and Password fields in the login window. Enter **root** in the Name field and your root password in the Password field, and then click Log In. Alternatively, if you set the login window to display the Name and Password fields (as explained in Customize the Login Window), you can log in as root by entering **root** as the name, the root password as the password, and then clicking Log In. (There are other ways of logging in as the root user, such as connecting remotely via the command line, using the su or sudo commands from Terminal, or by using certain third-party applications to access files as root. However, since Tiger lets an administrator access any files after authenticating, you probably won't need to employ these techniques.)

## Log Out of Your Account

When you finish working on your Mac, you may wish to:

- Log out of your account. Logging out of your account—by choosing Apple Menu > Log Out user name—closes all active applications, and then displays a login screen.
- Put your Mac to sleep, if you plan to use it again soon. You will remain logged in to your account.
- Shut down your Mac (if the pulsating light doesn't bother you). When you shut down, Tiger first logs out of your account, then goes through its shutdown routine. Next time you start up your Mac, it will restart and display a login window (or not) according to the settings applied in the Accounts preference pane (see earlier, Customize the Login Window).
- **TIP** Be aware of the difference between logging out and switching users via Fast User Switching. When you log out, you shut down all your applications, and it takes a while to log in again, especially if you have login items set. When you switch users via Fast User Switching, your account remains active, but in the background. You can switch back instantly, without waiting for any login items to open, and continue working with the same applications you were using before switching.
## **FAST USER SWITCHING**

Mac OS X allows you to switch from one user account to another without first logging out of the first account. You can keep applications and documents open in the first account, switch to another account and work in it, then switch back.

Fast User Switching is great for people who share a Mac. Say you're working on your Mac and your spouse or child simply *has to* check his email. Rather than log out and shut down your applications, you can switch to his account quickly, he can check his email, and then you can switch back to your account and pick up right where you left off. But since leaving applications open in non-active accounts uses some memory, users of professional applications, such as memory-hungry graphics or video programs, may find it impractical.

**WARNING!** Make sure you save any files you're working on before switching to another account. An administrator could shut down the Mac without returning to your account and saving them, or the Mac could crash while active in the other account.

When you turn on Fast User Switching, a User menu appears at the far right of your menu bar, to the left of the Spotlight icon. This menu offers commands for switching to other user accounts or displaying the login window.

**NOTE** Fast User Switching offers cool eye candy on Macs that support Quartz Extreme (all new Macs offer this support); as you switch, you see one account change to another as a 3D cube turns, with each cube face displaying a user's Desktop. Video cards that support Quartz Extreme currently include the NVIDIA GeForce2 MX, GeForce3, GeForce4 MX, and GeForce4 Ti video cards, or any ATI AGP Radeon card with a minimum of 16 MB VRAM. The 3D cube effect appears only if both accounts are set to the same screen resolution in the Displays pane of System Preferences.

## **Turn On Fast User Switching**

To enable Fast User Switching, open the Accounts preference pane, click the Login Options button (at the lower left), and check the Enable Fast User Switching checkbox. Then, choose how you want to view the User menu in the menu bar:

- By icon: A head-and-shoulders silhouette.
- **By short user name:** These are also the names of each users' home folder.
- **By full name:** These are the longer names used as user names on login.

From first to last, these different options take up more menu bar space.

**TIP** The User menu is a type of menu that is sometimes called a *menu extra* or a *status menu,* and it works much like the other items at the right of the menu bar. You can move it by pressing the Command key and dragging it to another location in the menu bar.

# **Use Fast User Switching**

To switch to another user's account, choose the name of the account you want to use from the User menu. Each time you switch to another user you must enter the new user's password, unless the new user has a blank password set (see the note, next, for more details about setting users up with blank passwords). **NOTE** Fast User Switching requires that each user enter a password to switch to her account. If you're in a family setting, and you're not worried about security, you can set up accounts for standard or managed users without passwords; just don't enter a password in the Password and Verify fields when you set up the accounts. You'll see an alert warning you of the security risk when you do this. (See Bypass the Login Window, earlier, for more information.)

Then, to switch to a user whose account has no password, just choose the name from the User menu and the Mac will switch without displaying a login window.

Don't create an administrator's account without a password, though; this is a security risk, and it could lead you to make mistakes if you change things when running that account.

**TIP** If you want to step away from your Mac without worrying about someone snooping around on your Mac, either choose Login Window from the User menu or select "Require password to wake this computer from sleep or screen saver" in the Security preference pane. If you use the latter approach, set a hot corner to activate your screen saver in the Desktop & Screen Saver preference pane and put the pointer in that corner to activate the screen saver before leaving your desk. Either way, when you come back, you must enter your password to use your Mac again, but you can rest easy knowing that no spying eyes saw or tampered with your work.

**GEEK FOOD** If you don't like to waste space in your menu bar and want a different way to invoke Fast User Switching from the command line or via an AppleScript script, you may find this hint from Rob Griffiths's Mac OS X Hints Web site useful: http://www.macosxhints.com/article.php? story=20031102031045417.

> Make sure you read not only the original hint but also the comments that follow for details of creating shell scripts and AppleScript scripts to switch users.

# Limitations of Fast User Switching

There's no such thing as a free lunch, and Fast User Switching is not without limitations, including the following:

- When you switch from one account to another, save your documents first. If another user tries to shut down the Macintosh, she can do so by entering an administrator name and password, but shutting down or restarting the Mac in this manner doesn't save open documents in non-active accounts.
- If you want to shut down or restart the Mac, and more than one account is open, you must enter an administrator user name and password. This means that if Sally Administrator lets Joe Standard User start working, but then goes out for tea, Joe won't be able to shut the Mac down. He'll be able to put it to sleep, but this may not be sufficient.
- If your Mac doesn't have much RAM, and you have several user accounts open, it may become sluggish as it must share memory among the open accounts, even if they're inactive.
- Some applications don't work correctly with Fast User Switching, or work for only one user at a time. In particular, applications that access user-specific preferences for network access may have problems with multiple user accounts open.
- If you have certain programs open under one account you won't be able to work with them under another account. Only one user at a time can use the Classic environment; if one user has started Classic, other users can't. If you use iChat, it logs out automatically when you switch users, logging in for the new user. When you switch back, it logs in again for the original user.

There aren't only limitations to Fast User Switching: on the plus side, you can use Fast User Switching to open one account, launch iTunes or iPhoto, then switch back to the first account and access these programs' shared music or shared photo libraries.

#### SIDEBAR HOW TO QUIT PROGRAMS RUNNING IN OTHER ACCOUNTS

What if you need to quit an application that another user left running? If you're an administrator, you can do that with the Activity Monitor, found in the **/Applications/Utilities** folder. Activity Monitor displays all active processes, regardless of who launched which programs.

So if you want to use a single-user application such as iTunes, select it in Activity Monitor and click the Quit Process button in the toolbar to force-quit the program. You can also force-quit Classic mode using Activity Monitor, but there is the chance that the user who left it active did not save her work.

Be sure to impress upon all users that they should *always* save their work before allowing another user to log in; force-quitting programs does so without saving open files.

## **MANAGE LOGIN AND STARTUP ITEMS**

Mac OS X has two types of items that it launches at startup or at login. The names Apple uses for these items has fluctuated in previous versions of Mac OS X; in Tiger, Apple has returned to a more logical naming convention:

- *Login items* are applications, documents, or folders that become active, launched, or open when you log in to your account, whether at startup or later.
- Along with login items, Mac OS X has *startup items*—low-level programs that activate when the Mac starts up, before any users log in. These startup items are akin to the extensions of Mac OS 9 and earlier, and include drivers, kernel extensions, network services, and other items that affect the Mac as a whole, no matter which user is logged in.

Both login and startup items play important roles in the operation (or lack thereof) of your Mac, and troubleshooting problems they may cause requires using different accounts.

## **Set Login Items**

My earlier discussion of setting up user accounts, Set Up an Account, doesn't mention the Login Items pane in the Accounts system preferences (**Figure 8**). You can view this pane only for your own account.



**NOTE** Don't be surprised if you find items in the Login Items list that you didn't add manually. Some installers, especially those for peripherals such as mice, trackballs, or keyboards, add items here so that their software launches when you log in. This software runs in the background, and has no windows, so you may not be aware that it is active. For example, on my iBook, I have login items such as MicrosoftKeyboardHelper, which starts the driver for my Microsoft Natural keyboard; iTunesHelper, a background process used by iTunes; and PowerMateDriver, which allows my PowerMate to function.

## Add login items

To add an application, document, or folder to your Login Items list, click the plus (+) button at the lower left of the Login Items pane, navigate to your item, and click Add. Alternatively, you can add items by dragging them from the Finder into the Login Items list.

Set as many login items as you want. You can set files you are currently working on to open at login, and remove them from the Login Items list when you no longer need them. However, if you set many applications as login items your Mac may take several minutes to open all the programs when you log in. Some people prefer waiting longer at login for many login items to open, whereas others prefer to wait for shorter chunks of time when they actually need a given program.

To open an application at login and then hide its windows after it launches, check the Hide checkbox for that item. The item's windows will appear briefly as they open, then disappear. To view the hidden windows, click the application's icon in the Dock. Hiding windows for login items is useful for programs such as iCal, which you want open to display reminders, but whose window you don't need to see all the time. A few applications ignore the Hide setting, and won't hide even if you tell them to do so.

ADD LOGINYou don't have to go to the Accounts preferences pane to add loginITEMS FROMitems. You can add any item that is in the Dock to the Login Items listTHE DOCKeasily: just click and hold its icon, then choose Open at Login from<br/>the shortcut menu that opens.

ADD LOGIN	While users can view only their own Login Items pane, administra-
<b>ITEMS FROM</b>	tors can add login items from the command line.
THE	A hint on the Mac OS X Hints Web site explains how:
COMMAND	http://www.macosxhints.com/article.php?story=200503160207388
LINE	29.

**TIP** To launch Classic at login, log in to the account in question, open the Classic pane in System Preferences, and check Start Classic When You Login. Or, add a Classic application or a document that uses a Classic application to the Login Items list.

**NOTE** Occasionally, an installer will delete the login items entries from your Accounts preference pane. This has happened to me on several occasions, and, since some login items are background applications that are required to control peripherals or specific programs, you may not know where to find them to add them back if necessary. You can find the paths to these login items in a preference file, found at ~/Library/Preferences/loginwindow.plist. It's a good idea to back this file up from time to time, in case you lose your login items entries after installing or upgrading software. To view the file, double-click it to open it in Property List Editor. (Property List Editor is part of Xcode Tools; if it is installed, you'll find it in /Developer/Applications/Utilities. If it's not installed, you can install it from your Tiger install disc: open **XcodeTools.mpkg**, located in the Xcode Tools folder.) After you open loginwindow.plist, don't worry if the contents look confusing; instead, click the Dump button to open a pane at the bottom of the window, where, among many lines of text and odd characters, you'll see the paths of your login items, presented like this:

## <key>Path</key>

#### <string>/Applications/iChat.app</string>

Once you know the paths, you can locate your login items and add them back to the Accounts preference pane if necessary.

### Mount servers at login

You can use login items to mount network volumes at startup. In many cases this can be a good way to connect effortlessly to a network server that you work with all the time. In Tiger, follow these steps for best results:

- 1. Click the Network icon in a Finder window sidebar to find the server you want to connect to and double-click its icon to display the server authentication dialog.
- 2. Enter the user name and password you use to log in on that server (they may be different than your local user name and password).
- 3. Check Remember Password in Keychain, and click Connect to display the volume selection dialog.
- 4. Select the volume(s) you wish to mount, and click OK to mount those volumes. The volume(s) will display in the sidebar of any Finder window (and may also display on the Desktop if that setting is on in the Finder's preferences).
- 5. In the Login Items pane of Accounts system preferences, add the volume as you would any other login item, by using the + (plus) button or dragging its icon in from the Desktop. (Don't drag it from a sidebar; all that does is remove the volume's icon from your sidebar.)

WARNING! In principle, mounting server volumes at login is a great idea; in practice, it can be problematic unless you're mounting a server that is guaranteed to be available. I tried several ways of connecting to servers, and, while connecting to an AppleShare, Samba (SMB), or FTP server works fine if the server is available, problems arise if the server is down or off. Sometimes, the Mac looking for the server would log in and display an AFP Connection Status window as it searched for the server, and eventually time out, displaying an alert that the connection failed. Other times, it would just wait at the beginning of the login process, after displaying the Desktop background, offering no way to move on. If the server became available, then it would proceed, but if not, I had to force-restart my Mac. **NOTE** The preceding steps for adding a server to your login items are for Mac OS X 10.4 or later; in some early versions of Mac OS X 10.3, you must instead mount the server by entering its IP address in the Connect to Server dialog—Choose Go > Connect to Server (Command-K) in the Finder.

## **Delete login items**

To remove any item from the Login Items list, click it to select it, then click the minus (–) button. This doesn't delete the original file; it just removes it from the list of items that launch automatically. You may want to do this when you finish a specific project, and no longer need to open items related to that project. You may also want to delete login items if you have problems when your Mac logs you in, and you suspect that an application opening at login is causing these problems. (See Troubleshoot Startup and Login Items, later, for more info.)

**TIP** To disable all your login items temporarily without removing them, press the Shift key after you enter your user name and password in the login window, (or if you have automatic login set, after the Mac displays the Starting Mac OS X screen) and keep holding it until login is complete.

# **Manage Startup Items**

Startup items are system-level items, found in /Library/ StartupItems and /System/Library/StartupItems, that launch or load when you turn on your Mac. These include drivers, kernel extensions, menu extras, preference panes, and more. Every Mac has lots of startup items that launch each time it boots. And when you install third-party software, especially drivers for input devices, additional startup items may be added to your system.

**GEEK FOOD** To get the nitty-gritty on startup items, see this Apple developer document on the boot process and startup items: http://developer.apple.com/documentation/MacOSX/Conceptual/ BPSystemStartup/Concepts/BootProcess.html. If you've used the Mac since Mac OS 9 or earlier, you may remember that you could start up your Mac while pressing Shift to deactivate extensions. This troubleshooting operation helped determine whether a problem was caused by an extension. Under Mac OS X, startup items are the closest things to extensions, and you can use the same technique to boot your Mac without loading these startup items.

To boot the Mac in Safe Mode, in which Tiger loads only essential system startup items and runs a disk check that's equivalent to checking the disk with Disk Utility, as you hear the startup chime, press the Shift key and release it just after the Mac displays the gray Apple and the spinning gear. This disables most Startup Items, yet still runs some of the basic items that are required for the system, so you can work with your keyboard and mouse, and use your video card.

You may not want to work in Safe Mode for any length of time, but you should be able to determine if a non-essential startup item is causing problems much as the extensions of yesteryear did.

## **TROUBLESHOOT STARTUP AND LOGIN ITEMS**

I suggested creating an account for troubleshooting earlier, in Set up a troubleshooting account; now, here's a brief explanation of how to use this account, and how to troubleshoot startup items and login items. If you notice a reproducible problem with your Mac, that is, a problem you can make happen again by doing certain things in a certain order, or if you experience a problem that happens quite often (even if you're not sure why), you can test if startup items or login items are causing it. Here are the steps:

- 1. Create a new administrator account (if you don't already have one) for troubleshooting. This troubleshooting account should be a virgin account, with no additions, drivers, or extra software. (See Set Up an Account for information on setting up the new account.)
- 2. Log in to your troubleshooting account and see if your problem disappears, either by trying the specific actions that cause it to happen or by working for a while in a way that typically brings on the problem.
  - **If your problem goes away:** There's a good chance that it relates to your normal account. Specifically, one or more login items may be the culprit, but your problem could also be caused by certain user preferences. Continue with Step 3, next.
  - **If your problem doesn't go away:** Then it has nothing to do with a particular account; skip ahead to Step 5.

# **NOTE** Problems can occur for many reasons besides just bad login items or preference files, and this ebook is not designed to diagnose them. For help, see the **Resources** section near the end of this ebook.

- 3. Now that you know that something about your normal account is causing the problem, check if a login item is the culprit by logging back in to your normal account with login items disabled. To do so, press the Shift key after authenticating in the login window, (or if you have automatic login set, after the Starting Mac OS X screen appears), and keep holding Shift until login is complete.
  - If the problem goes away: You've pinpointed a login item as the cause. Continue with Step 4.
  - If the problem doesn't go away: Skip ahead to the next section, Troubleshoot Preference Files.
- 4. While logged into the problem account, in Accounts system preferences, in the Login Items pane, note which login items are loading (**Figure 9**). If you like trying out shareware and freeware, or if you installed drivers for hardware you no longer use, their login items might be causes of the problem; however, you may have to test systematically to find the culprit.

IGURE	Hide	Item	Kind		Here is the Login It
		🚈 LaunchBar	Application		list for my standard
		Snapz Pro X	Application	Z	count. I added the
		觉 iCal	Application		five items. The othe
		🥵 iChat	Application		were added by inst
		NetNewsWire	Application		or programs; for in
		MicrosoftKeyboardHelper	Application		stance, Transport
		G ShuttleXpressHelper	Application		and System Events
		Ø Transport Monitor	Application	-	and System Lyents
		System Events	Application	Ŧ	Eoldor Actions

If removing a login item solves the problem, congratulations; you can stop here! If you want to replace it, try re-installing its associated software or checking if a later version is available.

**EXAMPLE** After installing Tiger, I had to reinstall certain drivers, including one for my Canon LIDE 30 scanner. The installer added a pair of back-ground button managers that control buttons on the scanner to my Login Items list: one for my scanner and one for a different model. I don't use these buttons, so I deleted both items, but if I did want to use my scanner's buttons, I would have deleted only the login item that didn't correspond to my scanner model.

- 5. If your problem occurs when you log in both with a regular account and with your troubleshooting account, then you can't blame the problem on something specific to the regular account. If that's the case, the next thing to check for is if any startup items are at fault: boot your Mac in Safe Mode, as described earlier in Manage Startup Items.
  - **If your problem goes away:** You can be sure that a startup item is guilty. Move on to Step 6 to see how to deactivate startup items.
  - **If your problem does not go away:** You have run out of luck with these steps. Your problem relates neither to a specific account nor to your startup items. It's outside the scope of this ebook, and you may wish to consult a Web site or book such as those listed in Resources.
- 6. To find the problem startup item, you must deactivate a group of items (or just one). Then restart your Mac and see if the problem has gone away.

When deactivating startup items, it's dangerous to work with the two StartupItems folders, because they contain many essential items that you can't work without, and you absolutely should not move or delete anything you find in them. You can, however, use a tool such as Diablotin (see the sidebar, next) to temporarily deactivate certain startup items for testing purposes. Remember that you must restart after deactivating different system startup items to see if your problem has gone away or not. **SIDEBAR** To manage and deactivate system startup items (and other items as well), the best tool is Diablotin (that's French for little devil, or imp), a freeware preference pane by Stéphane Sudre (**Figure 10**). http://s.sudre.free.fr/Software/Diablotin.html



Diablotin is a sort of Extensions Manager for Mac OS X. It displays a list of categories, and you can click an expansion triangle to show a category's contents. If you select the Show System Library Items checkbox, the StartupItems category at the bottom of the list also displays essential kernel extensions and services. Be careful—if you deactivate any of these you may not be able to boot your Mac.

You can deactivate any item in the categories that Diablotin displays by deselecting the item's checkbox. Some items are protected and require that you authenticate by clicking the lock icon and entering an administrator password. (Even if you are an administrator, Diablotin protects you against making stupid mistakes by requiring you to click the lock to make changes.)

In the StartupItems category you'll find startup items that act at a system level, and there may be some which don't belong there, because they correspond to software you've long since removed from your Mac.

Bear in mind that disabling any startup items may affect your system or applications in unexpected ways, but when troubleshooting, it's worth trying to see if it solves your problem.

## **TROUBLESHOOT PREFERENCE FILES**

Each account has many preference files, which are stored in ~/Library/Preferences. Many, though by no means all, of these files have names ending with .plist.

Sometimes these files can become corrupted—this can occur if an application crashes, if you have a kernel panic, or if a program writes the wrong data in a file. Corrupted preference files can cause crashes and freezes, and, if these files affect the system, as opposed to individual applications, they can lead to widespread problems.

If you think you have a problem with a user account's preference files, try Steps 1–3 in "Troubleshoot Startup and Login Items," previously, to find out for sure. To troubleshoot a problem with user preferences, follow these steps:

1. Remove preference files for any applications that are causing problems. For example, if you're having problems in the Finder, move the **com.apple.finder.plist** file to the Desktop, then log out and log in again. If you're having problems with a specific application, quit the application, move its preference file, and then launch it again.

If you remove a preference file from the Preferences folder, the associated application will recreate it on the next launch. The new, default preference file won't contain any custom settings you've applied. (The old preference file, the one on the Desktop, still holds your settings.)

- If your problem goes away: You've found the culprit (or narrowed the culprit down to one of the preference files you removed). Go ahead and delete the offending file and get on with your life. However, if you are missing custom settings, you should reset them. If resetting them would be time consuming, you may be able to restore an old copy of your preference file from a backup.
- **If your problem doesn't go away:** Put your old preference file back (so you don't have to recreate your custom settings), and move to the next step.

**WARNING!** Removing a preference file may cause an application to think it hasn't been registered properly. That's why you should keep the old preference file until you're sure it's the problem, and even then, don't throw it out until you verify that you have the registration code for the application in question.

- 2. If moving a few preference files to the Desktop fails to address your problem, try moving your entire Preferences folder to the Desktop and restarting.
  - If the problem goes away: You know for sure that a preference file is guilty, but now you need to find which one. Continue with Step 3.
  - If the problem does not go away: The user preferences are not causing the problem. If you already followed the steps in Troubleshoot Startup and Login Items, then, unfortunately, your problem is outside the scope of this ebook. One of the items mentioned in Resources may prove useful.
- 3. Return the Preferences folder to your Library folder, view the Library folder in List view, and sort the files by Date Modified (**Figure 11**), using the expansion triangles to see the folder contents. You should work by trial and error: start with preference files that changed recently by moving those files to the Desktop, and then log out and log in. If the problem doesn't go away, replace those files and try some more. Continue this process until you find the corrupt preference file.

··· [2		Preferences	6		C
		_ <b>♀</b> ▼	Q		_
	Kick's iMas	Name	Date Modified 🔹 🔻	Size	
0	KIIKS IMac	📄 com.apple.systemuiserver.plist	3/26/05, 11:19 AM	4 KB	
0	iDisk	📄 com.apple.finder.plist	3/26/05, 11:13 AM	8 KB	
0	A CONTRACTOR OF A CONTRACTOR OFTA CONTRACTOR O	📄 com.apple.dock.plist	3/26/05, 11:07 AM	4 KB	
C	Network	com.apple.helpviewer.plist	3/26/05, 11:06 AM	4 KB	
	Tiger	com.apple.systempreferences.plist	3/26/05, 11:06 AM	4 KB	
-		com.apple.Syndication.plist	3/26/05, 10:52 AM	4 KB	
in a	Desktop	com.apple.recentitems.plist	3/26/05, 9:57 AM	16 KB	
-	Desktop	com.apple.keychainaccess.plist	3/26/05, 8:57 AM	4 KB	
1	kirk <sup>*</sup>	com.apple.SyndicationAgent.plist	3/26/05, 8:56 AM	4 KB	
A	Applications	Com.apple.Safari.plist	3/25/05, 4:35 PM	4 KB	
1	Applications	com.ambrosiasw.snapz.plist	3/25/05, 4:29 PM	4 KB	
19	Documents	com.apple.iChat.SubNet.plist	3/25/05, 3:25 PM	4 KB	
	S	com.apple.iChat.labber.plist	3/25/05, 3:25 PM	4 KB	
teres.	Movies	Com.apple.iChat.AlM.plist	3/25/05, 3:25 PM	4 KB	
6	Music	Com apple iChat plist	3/25/05, 3:25 PM	4 KB	
-		com.apple.Preview.plist	3/25/05, 3:23 PM	4 KB	
	Pictures			V.C.STOL	
_		72 items, 5.02 GB available			
		72 Rems, 5.02 GB available			

## **SHARE FILES AMONG USERS**

If several users have accounts on the same Macintosh, it's likely that they will want to share files among their accounts. One user will want another to check his report, or give pictures he received by email to other users, or all users may want to access common data such as digital music files or photos.

**NOTE** Although I talk here about sharing files among users on the same Mac, I'm not talking about *file sharing*, which involves sharing and accessing files on two or more computers over a network. If none of these options seem sophisticated enough for your requirements, you may wish to look into file sharing and the various options it includes, such as dedicated file-sharing servers, FTP servers, and more. That's the subject of another Take Control ebook, Glenn Fleishman's *Take Control of Sharing Files in Tiger*.

http://www.takecontrolbooks.com/tiger-sharing.html

You can share a file on a Macintosh using one of four common locations, each of which has pros and cons. I summarize these methods in **Table 3**, next, and discuss each option more thoroughly later in this section.

Table 3: Four Ways to Share Files among Users			
Sharing Method	Advantages	Disadvantages	
Shared volume	<ul> <li>Allows full access to all users.</li> <li>You can set the volume to ignore permissions.</li> <li>Generally offers more disk space than other methods.</li> </ul>	<ul> <li>You need a dedicated volume or hard disk.</li> <li>Shared volumes must be accessible; internal shared volumes must be mounted, external shared volumes must be on, and network volumes must be available.</li> <li>Files are accessible to all users.</li> </ul>	
/Users/Shared folder	<ul> <li>You don't need a dedicated volume or hard disk.</li> <li>This folder is always accessible; you don't need to worry about turning on a drive or network server.</li> </ul>	<ul> <li>You need to be aware of permissions issues.</li> <li>Files are accessible to all users.</li> </ul>	
Public folders and Drop Boxes	<ul> <li>Files in your Public folder are accessible to all users.</li> <li>You can transfer files to a single user, ensuring that no other user can access them.</li> <li>Your Drop Box is secure; users can only copy files to other users' Drop Box folders.</li> </ul>	<ul> <li>Files in your Public folder are accessible to all users.</li> <li>Using the Drop Box folder requires that you transfer files to each of several users individually.</li> </ul>	
iDisk	<ul> <li>Files on your iDisk's Public folder are accessible to all users, though you can limit access by setting a password to protect this folder.</li> <li>You can access files in your iDisk's Public folder from an- other Mac, from a Windows computer, or even from a Web page.</li> </ul>	<ul> <li>Copying to and from an iDisk is slow.</li> <li>Additional iDisk space beyond the maximum 235 MB available from a standard 250 MB. Mac account is expensive.</li> <li>Files in an iDisk's Public folder are accessible to all users, and even to the public, though you can limit access by password-protecting this folder.</li> </ul>	

# **Share Files via a Shared Volume**

If you have more than one partition on your internal hard disk, or if you have more than one hard disk (internal or external) you can use one of these volumes as a shared volume. This is often the best way to share files among users on a single Mac, for two reasons:

- **Ease of use:** Because you can turn off permissions for the entire volume, users can read (view and open) and write (copy and save) files on this volume without running into confusions caused by permissions settings. Of course, you should turn off permissions only if the files on the volume should be shared with everyone who could conceivably access them.
- **Large amount of space:** A shared volume is likely to have a large amount of disk space, giving you plenty of room to store commonly shared files, particularly large ones such as digital music files, photos, or movies.

To configure a shared volume so that users can have read-and-write access, do the following:

- 1. Working on the Desktop or in a Finder window, select the volume you want to share and choose File > Get Info (Command-I) to open the Info window for the volume.
- 2. If the Ownership & Permissions section is closed, click its expansion triangle to display the volume's permissions.
- 3. Check Ignore Ownership on This Volume.

Mac OS X now ignores permissions and ownership for all files placed on this volume. All users, except those with simplified accounts, can work with files on this volume.

## Share Files via the Shared folder

Every installation of Mac OS X has a **/Users** folder that contains home folders for all the accounts created on the Mac. The **/Users** folder also contains a special Shared folder that is designed so anyone can place files in the folder or copy files from it. All users have access to this folder, even users with simplified accounts, who see it as one of the three folders in the Dock. In many cases, using the Shared folder is simple: you copy files you want other users to access into this folder, and they can copy them into their personal folders at any time. But, in practice, there are a few sticky points with using the Shared folder as a file exchange location.

Sharing files via the Shared folder is not as flexible as using a shared volume. Files in the Shared folder retain permissions according to the user who placed them there, and, although users can copy files from the Shared folder to their home folders, changing the files' permissions as they do so, users may not be able to open and edit files directly from this folder.

**NOTE** Mac OS X uses file *permissions* to tell the system which user owns a file, and what access other users can have. Some files or folders offer *read-only* access, so other users can read or copy them to other folders where they have write access, but not make changes to them in a read-only folder; others offer *read-and-write* access, so others can do whatever they want. Still other files and folders may give no access to other users.

When you place a file in the Shared folder, this file retains your ownership: you are listed as the file's owner, you have read-and-write access, and other users have read-only access. For another user to be able to modify your file he must copy it into his home folder or one of its subfolders; copying the file changes the permissions to give him ownership and full access, and he can use the file in any way he wants. This permissions change on copying applies to files, folders, and applications.

However, the original file remains in the Shared folder with its original permissions. So, say Henry David Thoreau wants his friend Ralph Waldo Emerson to review something he wrote. If Henry places a copy of *Walden* in the Shared folder, Ralph may naturally try to launch the file, by double-clicking it, instead of copying it to his home folder. While he can read and therefore open the file, in most cases he'll find that he cannot write to it, and therefore cannot save his changes to the original file. Ralph can copy this file into his home folder, read it, make changes and comments to it, and save it. But when Ralph tries to copy the file back to the Shared folder, he comes up against a hurdle—Ralph doesn't have permission to change the original file by replacing it with the version he has reviewed (see **Figure 12**). So he must give the file a new name before he can place it in the Shared folder. Alternatively, Ralph can use the File > Save As option to save the file in the Shared folder under a new name.

FIGURE 12	О 🖯 Сору
	The operation cannot be completed because you do not have sufficient privileges for some of the items.
	After working on a file copied from the Shared folder, another user
	cannot return the file to this folder under the same name because doing so would replace the original, which still belongs to the user who placed it there.

In summary, any files you want to replace in the Shared folder, after changing them in any way, must have different names than their originals. (Realistically, this issue isn't a major problem in many collaborative working environments, because it's common practice for the file name to contain a version number as well, and for each user to increment that version number after editing the file.)

By this same logic, only the user who placed files in the Shared folder can delete them, though an administrator can also do so by authenticating.

In spite of this minor annoyance, the Shared folder is the best way for users to share occasional files if no shared volume is available. Anyone can access this folder, and anyone can copy files to and from it.

#### SIDEBAR CHANGE PERMISSIONS ON SHARED FILES

For a file like an AppleWorks database that you want to share permanently without requiring each user to copy it in and out of the Shared folder, there's another alternative: setting the permissions on the file to give any user read-and-write permissions. Follow these steps:

- 1. Copy the desired file to the Shared folder.
- 2. Select it, and choose File > Get Info (Command-I) to display the Info window for the file.
- 3. Open the Ownership & Permissions expansion triangle, if necessary, and open the Details expansion triangle inside.
- 4. From the Others pop-up menu, choose Read & Write; then close the Info window.

Now any user on your Mac can read and write to the file. If either user overwrites the file by copying a new version into the Shared folder, you'll have to run through these steps again.

## **Share Files via Public Folders and Drop Boxes**

Each user's home folder contains a Public folder, which holds files the user wishes to share with others (it functions like a publicly viewable out-box). Further, the Public folder contains a Drop Box folder (like a private in-box), which can receive files from others. Sharing files via Drop Box folders is best if you want to share files with individual users without providing access to all the users on your Mac or on your network.

#### **Public folders**

To use your own public folder, place files that you wish to share into it. Once you place a file in your Public folder, other users can see and copy that file. (As with the Shared folder, Mac OS X changes the permissions of the file when it is copied out of your Public folder, making it the property of the person copying it.) **Figure 13** shows what other users see when they visit your home folder.



WARNING! Be aware of two things. First, *all* users can access your Public folder, so files you place there can be copied by any user, whether he physically uses your Mac or connects to it over a network. Second, all users can access the contents of your home folder, so don't save files at the top level of this folder, if you are concerned about this. You can see in **Figure 13** that the do-not-enter symbols are on *only* six of your home folder's sub-folders. If you create additional folders directly in your home folder, other users can access them and copy files from them, just like your Public folder.

Feel free to organize materials stored in the Public folder by creating folders inside your Public folder; for example, if you want users to know which files you have left for them, you could create folders with their names, such as For Ralph, For Louisa May, and For Nathaniel. This won't prevent other users from viewing their contents or copying these files, but it will help users find the files intended for them. If you don't care who sees these files, this is a good solution.

## **Drop Box folder**

The Public folder works well for providing other people with files you want to share, but how do they return files? They use the Drop Box folder, which is located inside the Public folder (see **Figure 14**).

#### FIGURE 14



The Drop Box is a *write-only* folder; you cannot open another user's Drop Box folder. You can only copy files into it by dragging them onto its icon.

You can copy any files you want into another user's Drop Box, and these files will inherit that user's permissions. But you can't retrieve any files from the Drop Box if you make a mistake, nor can you copy over any files you've already placed there. To replace a file you must change its name first, and make sure the owner of the Drop Box expects to find the second file with a different name.

## Share Files via an iDisk

The final suggestion I have for sharing files with other users on the same Mac is the slowest and suffers from size limitations: if you have a .Mac account, you can use your iDisk as a repository for shared files. To set up your Mac for sharing files via your iDisk, set the same user name and password in the .Mac preference pane for each user on your Mac. That way each user sees the same iDisk in the Finder. (Mount your iDisk in the Finder by choosing Go > iDisk > My iDisk or pressing Command-Shift-I).

Then copy the files you want to share to any of the iDisk's folders; the files magically inherit the correct permissions once a user mounts the iDisk, no matter which user owned the files when copying them to the iDisk. The advantage to sharing files via your iDisk is that any user with the correct .Mac user name and password can delete or replace files on the iDisk; nobody has to rename files, as is generally true for using the Shared folder or the Drop Box folder. In addition, by placing files in your iDisk's Public folder, you allow anyone to access them from Windows computers, using Apple's iDisk Utility, or from the Web, if you set up a file-sharing home page for your .Mac account. Bear in mind that "anyone" really does include anyone on the Internet (unless you protect the Public folder with a password; see the tip next), which may not be what you want.

**TIP** To protect your iDisk's Public folder with a password, so strangers cannot access your files, open the .Mac preference pane in System Preferences. Click the iDisk tab, check Password Protect Your Public Folder, and enter a password. You must give this password to anyone who wants to access your iDisk's Public folder. This password also protects any file-sharing Web page that you set up with .Mac.

You're not limited to using your iDisk's Public folder for sharing files among users of your Mac; you can put files in any of your iDisk's other sub-folders (though it's best to stick with Documents, Movies, Music, and Pictures). The good part about using one of the other subfolders is that you don't need to worry about other people on the Internet being able to access your files.

The primary disadvantage to using an iDisk to share files locally is that it is slow; it takes a long time to copy files to and from the iDisk, even if you have a relatively fast Internet connection. Also, by default, your iDisk provides only 250 MB of space (shared between your iDisk and your .Mac email account, with a 235 MB maximum allowed for the iDisk), which isn't much these days. You can buy more, but it's an expensive way to share files among users on the same Mac.

## **Resources**

#### Consult these books when things go wrong with your Mac:

- *Mastering Mac OS X, 4th Edition* (Sybex), by Todd Stauffer and Kirk McElhearn
- *The Mac OS X Command Line: Unix Under the Hood* (Sybex), by Kirk McElhearn
- *Mac OS X Power Tools, Second Edition* (Sybex), by Dan Frakes
- *Mac OS X Help Line, Tiger Edition* (Peachpit), by Ted Landau

#### And some of the best troubleshooting Web sites are:

- MacFixIt: http://www.macfixit.com/
- MacInTouch: http://www.macintouch.com/
- Mac OS X Hints: http://www.macosxhints.com/
- Apple's troubleshooting site: http://www.apple.com/support/
- Apple's troubleshooting discussion forums: http://discussions.info.apple.com/

## **APPENDIX A: SHARE DIGITAL MEDIA FILES**

Lots of people want to share songs and photos that are stored on their computers, and the most common tools that Mac OS X users use to access shared songs and photos are iTunes and iPhoto.

By default, when a user first launches iTunes or iPhoto, the program creates its own storage folder inside that user's home folder. iTunes creates ~/Music/iTunes and iPhoto creates ~/Pictures/iPhoto Library. Despite this similarity, you use different methods to share music and photos among users on a Mac.

## **Share Your iTunes Library**

It's easy to share music in iTunes because iTunes is happy to load its music files from any location. Follow these steps:

- If you have already ripped some of your CDs to MP3 or AAC files, copy your ~/Music/iTunes/iTunes Music folder to the Shared folder. Otherwise create a new folder in Shared called iTunes Music. You can also put the iTunes Music folder on a shared volume; see Share Files via a Shared Volume, earlier, and adjust the instructions in Step 2b accordingly.
- 2. For each user in turn:
  - a. Launch iTunes, choose Preferences (Command-,) from the iTunes menu, and click the Advanced button.
  - b. Click the Change button next to the iTunes Music Folder Location, and then navigate to and select the iTunes Music folder in the Shared folder. Click OK to save your changes.
  - c. In the Finder, select all the songs in the shared iTunes Music folder and drag them into the iTunes window to import them.

This approach has the advantage of letting multiple users share the same music while still letting everyone create and maintain individual playlists, since the playlist information stays with each user. On the downside, every time you rip a new CD, each user must import the songs from it manually by dragging them into iTunes. The silver lining in that cloud is that each user can pick and choose which of the shared albums to import.

**TIP** You can also put the iTunes Music folder on a shared network volume and access it via file sharing, but that's a topic of another Take Control ebook, notably, Glenn Fleishman's *Take Control of Sharing Files in Tiger*. http://www.takecontrolbooks.com/tiger-sharing.html

## **Share Your iPhoto Library**

Sharing your iPhoto Library is more complex than sharing your iTunes Music folder because iPhoto is more particular about where its files live, and because all users need read-and-write access for importing and editing purposes. The trick is that you must put the iPhoto Library folder on a shared volume (or a network volume); the **/Users/Shared** folder won't work well. (To set up the shared volume, see **Share Files via a Shared Volume**, previously, and follow the steps to turn off permissions to the volume so all users can access the files.) Here are the steps, which work with iPhoto 2, 4, and 5:

- 1. Back up your photos before starting these steps.
- 2. Make sure iPhoto is not running.
- 3. Open a Finder window showing the location on the shared volume where you want to store your iPhoto Library folder.
- 4. Open another Finder window showing your Pictures folder.
- 5. Press Command while dragging the iPhoto Library folder to move it from the Pictures folder to the shared volume. (By pressing Command after you start dragging, you tell the Finder to move the folder rather than copy it.)

- 6. For each user in turn, press Command-Option and drag the iPhoto Library folder to ~/Pictures. (By pressing Command-Option while dragging the folder to a user's Pictures folder, you tell the Finder to make an alias in the destination rather than copying the folder.) By default, iPhoto always looks for a folder called "iPhoto Library" in the Pictures folder, and it accepts an alias happily.
- 7. Verify that each user can import a photo and edit existing photos, and that every other user can see the results of those changes. After that, all users can use iPhoto with the shared iPhoto Library just as they would normally.
- **NOTE** Why can't you use the /Users/Shared folder when sharing iPhoto photos among users on the same Mac? The Shared folder doesn't work well, because the permissions that iPhoto sets when one user imports new photos prevent other users from editing those photos. Another way around the problem is to use iPhoto Library Manager (http://homepage.mac.com/bwebster/iphotolibrarymanager.html) to create and work with several libraries from within a single user account.

# **ABOUT THIS EBOOK**

In contrast to traditional print books, Take Control ebooks offer clickable links, full-text searching, and free minor updates. We hope you find them both useful and enjoyable to read. Keep reading in this section to learn more about the author, the Take Control series, and the publisher.

# **About the Author**

Kirk McElhearn is a freelance writer, journalist, and translator. He has written manuals for many popular Mac programs, as well as technical documentation for Windows and Linux programs. Kirk has written and co-written a dozen books about using the Mac, including:

- The Mac OS X Command Line: Unix Under the Hood (Sybex) http://www.mcelhearn.com/unix.html
- *iPod & iTunes Garage* (Prentice Hall) http://www.mcelhearn.com/ipod.html
- *How to Do Everything with Mac OS X Tiger* (Osborne) http://www.mcelhearn.com/htde.html
- *Mastering Mac OS X, 4th Edition* (Sybex), with Todd Stauffer http://www.mcelhearn.com/tiger.html
- *Mac Upgrade and Repair Bible, 3rd Edition* (Wiley), with Todd Stauffer http://www.mcelhearn.com/bible.html
- *Microsoft Office v. X Inside Out* (Microsoft Press), with Tom Negrino and Kate Binder http://www.mcelhearn.com/insideout.html

Kirk has written articles for a variety of publications and is a regular contributor to *TidBITS*, *Macworld*, and iPodlounge. His blog, Kirkville (http://www.mcelhearn.com/) presents articles on Macs, iPods, books, music, and much more. A native New Yorker, Kirk has lived in France for more than 2 decades, and currently resides in Guillestre, a village in the French Alps. You can check out pictures of Guillestre and its surroundings at http://homepage.mac.com/ kirkmc/PhotoAlbum8.html.

To contact Kirk, send him email at kirk@mcelhearn.com.

# **Shameless Plug**

And now, a shameless plug for my latest books:

- iPod and iTunes users will find that my recent *iPod & iTunes Garage* is the ultimate iPod book. Learn how to do everything with your iPod, how to manage your music with iTunes, and how to use additional software and accessories to make sure the music never stops.
- And for those who like to fiddle with things, tweak their Macs, and access the hidden power behind Mac OS X, my recent book *The Mac OS X Command Line: Unix Under the Hood* will teach you how to use the command line to get the most out of your Mac.

Find out more about both of these books, and others, at http://www.mcelhearn.com/.

# **Author's Acknowledgements**

I'd like to thank Adam and Tonya Engst for coming up with the Take Control series idea; Tonya Engst for her detailed editing, efficient management, and gentle prodding; and the entire Take Control gang, who have made this an interesting process. The first edition of this book was one of the first Take Control books. Back in those days, the Take Control experiment was just that: an experiment to see how readers would react. Now, some 18 months down the line, the Take Control series has shown that there is another way to write and publish books about computers, and I'm very happy to be a part of this. Thanks also to all the readers who make writing books like this worthwhile, and whose feedback has helped improve each successive version and update.

This book was made possible in part by large quantities of first flush 2004 and 2005 Darjeeling tea, provided by Le Palais des thés in Paris, and music by The Durutti Column (http://www.column.freeuk.com/), moe. (http://www.moe.org/), the Grateful Dead (http://dead.net/), Bill Evans, Gustav Mahler, and Charles Ives.





This ebook was produced on a 933 MHz G4 iBook and a 400 MHz iMac, using Microsoft Word, Snapz Pro X, and Photoshop Elements. Pre-production was carried out using Inspiration, for outlining, and iChat, for collaborative communication.

# **Take Control: The Series**

Take control of computing with the Take Control series of highly practical, tightly focused electronic books! Written by leading Macintosh authors, edited by TidBITS, and delivered to your electronic doorstep within moments of "going to press," the Take Control ebooks provide just the technical help you need. http://www.takecontrolbooks.com/

## You may also be interested in:

- *Take Control of Upgrading to Tiger*, by Joe Kissell http://www.takecontrolbooks.com/tiger-upgrading.html
- *Take Control of Customizing Tiger*, by Matt Neuburg http://www.takecontrolbooks.com/tiger-customizing.html
- *Take Control of Sharing Files in Tiger*, by Glenn Fleishman http://www.takecontrolbooks.com/tiger-sharing.html
- *Take Control of Mac OS X Backups,* by Joe Kissell http://www.takecontrolbooks.com/backup-macosx.html

# **About TidBITS Electronic Publishing**

Take Control ebooks are a project of TidBITS Electronic Publishing. TidBITS Electronic Publishing has been publishing online since 1990 when publishers Adam and Tonya Engst first created their online newsletter, *TidBITS*, about Macintosh and Internet-related topics. *TidBITS* has been in continuous, weekly production since then, and it is the leading online Macintosh newsletter.

To stay up to date on Mac OS X 10.4 Tiger and other Macintosh topics, be sure to read *TidBITS* each week. At the *TidBITS* Web site you can subscribe to *TidBITS* for free, participate in discussions on the TidBITS Talk mailing list, or search 15 years of news, reviews, and editorial analysis. Adam and Tonya are well-known in the Macintosh world as writers, editors, and speakers, and they have written innumerable online and print publications. They are also parents to Tristan, who thinks ebooks about trains, clipper ships, and dinosaurs would be cool.

# **Publisher's Production Credits**

- Cover: Jeff Carlson, http://www.necoffee.com/
- Take Control logo: Jeff Tolbert, http://jefftolbert.com/
- Editor in Chief: Tonya Engst, http://www.tidbits.com/tonya/
- Publisher: Adam Engst, http://www.tidbits.com/adam/

...and the many friends and relatives that helped in large and small ways by providing technical expertise, dinner, childcare, and so on. A special thanks to Ithaca's Cooperative Extension for a lovely duck race, which provided a necessary break. Copyright © 2005, Kirk McElhearn. All rights reserved.

Take Control of Users & Accounts in Tiger

Published by:

TidBITS Electronic Publishing 50 Hickory Road Ithaca, NY 14850 USA http://www.takecontrolbooks.com/

April 2005. Version 1.0

Take Control ebooks help readers regain some measure of control in an oftentimes out-of-control universe. Take Control ebooks also streamline the publication process so that information about quickly changing technical topics can be published while it's still relevant and accurate. Send comments about this, or any, Take Control ebook to tc-comments@tidbits.com.

This ebook does not use copy protection because copy protection makes life harder for everyone. So we ask a favor of our readers. If you want to share your copy of this ebook with a friend, please do so as you would a physical book, meaning that if your friend uses it regularly, he or she should buy a copy. (Use the Help a Friend offer on the cover page of this ebook to give your friend a discount!) Your support makes it possible for future Take Control ebooks to hit the Internet long before you'd find the same information in a printed book. Plus, if you buy the ebook, you're entitled to any free updates that become available.

Although the author and TidBITS Electronic Publishing have made a reasonable effort to ensure the accuracy of the information herein, they assume no responsibility for errors or omissions. The information in this ebook is distributed "As Is," without warranty of any kind. Neither TidBITS Electronic Publishing nor the author shall be liable to any person or entity for any special, indirect, incidental, or consequential damages, including without limitation lost revenues or lost profits, that may result (or that are alleged to result) from the use of these materials. In other words, use this information at your own risk.

Any trademarks, service marks, product names or named features that appear in this ebook are assumed to be the property of their respective owners.
## What do you get when you buy from Small Dog Electronics?



## Now, \$5 off your next web order!

## **Small Dog Electronics**

something to smile about...



**Apple Specialist** 

Redeem your coupon on-line at www.smalldog.com Limited to one use per customer. Enter coupon # bone36140694 at check out.

**1-800-511-MACS** We measure success in more than just dollars.