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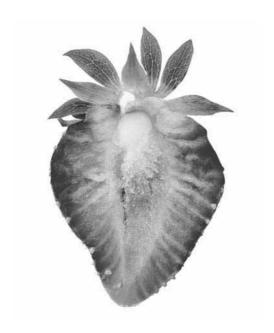
iPhone for Work

Increasing Productivity for Busy Professionals

Ryan J. Faas

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iPhone for Work: Increasing Productivity for Busy Professionals

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About the Author



■Ryan Faas is a freelance technology journalist and network consultant who has been writing about Apple products and the mobile industry for over a decade. His first book, written while serving as Mac hardware guide/editor for About.com, was *Troubleshooting*, *Maintaining*, and Repairing Macs (Osborne/McGraw-Hill, 2000), followed by Essential Mac OS X Panther Server Administration (O'Reilly, 2005) and Creating a Widget in Dashcode (Peachpit, 2007).

Ryan is also a prolific writer of shorter works. His articles and how-to guides have been featured by Computerworld, InformIT, Peachpit Press, About.com, and Jupiter Media's Datamation news service. In 2008, he was awarded a Neal National Business Journalism award for his work featured in Computerworld's Week of Leopard series.

In addition to writing, Ryan has spent a large portion of the past 15 years in the systems and network management fields as a systems administrator, trainer, and all around cross-platform technology consultant. His client list has ranged from human service nonprofits and private schools to Fortune 500 companies and major media agencies. Living in upstate New York, he continues to offer training, documentation and editing, and network consulting services to organizations around the world.

Despite his focus on covering all things technology, Ryan still lays the thanks for his entire career to his high school journalism teacher, who was the first person to ever sit him down in front of a Mac (or any computer beyond a 1980s-era Commodore 64) and introduce him as teenager lacking in direction to the worlds of writing, modern technology, and Apple products (at the time a Mac IIci).

About the Technical Reviewer



Kunal Mittal serves as an Executive Director of Technology at Sony Pictures Entertainment, where he is responsible for the SOA and Identity Management programs. He provides a centralized engineering service to different lines of business and consults on open source technologies, content management, collaboration, and mobile strategies.

Kunal is an entrepreneur who helps startups define their technology strategy, product roadmap, and development plans. With strong relations with several development partners worldwide, he is able to help startups and even large companies build appropriate development partnerships. He generally works in an advisor or consulting CTO capacity, and serves actively in the project management and technical architect areas.

He has authored and edited several books and articles on J2EE, cloud computing, and mobile technologies. He holds a master's degree in software engineering and is an

instrument-rated private pilot.

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Ryan Faas

Introduction

Since Apple announced it in January of 2007, the iPhone has repeatedly revolutionized the world of mobile phones. The iPhone was the first phone to utilize a touchscreen as the sole input technology. It was the first phone that proved that average consumers were willing to pay for a well-designed smart phone that was also a media player, and it was the first smart phone to truly display web content as well as a computer. Those accomplishments were achieved the day the first iPhone shipped.

With Apple's first major refresh to the iPhone's hardware and software, the company dramatically expanded the device's capabilities with faster network connectivity, GPS capabilities, and integration with Microsoft Exchange (the most commonly used collaborative suite in the business world). But, more significantly, Apple gave third-party software developers the ability to create new applications for the iPhone and leveraged the power of the iTunes Store to make it easy and convenient for users to browse these new applications, and to buy, download, and install them in one easy step. Within months, iPhone users had access to tens of thousands of applications that ran the gamut from virtual whoopee cushions to business and project management solutions, and everything in between.

Between the ever-expanding options of additional applications and Apple's introduction of some core business features to the iPhone, it came as no surprise to me last year when I began to get asked if the iPhone could be a real solution for business in the way that the Blackberry or Windows Mobile devices were. The answer, of course, was yes. And over the past year, I've seen companies of all sizes, as well as individual workers and consultants, purchase and integrate the iPhone into their workflows.

This book is based on partly my personal experience as a technology consultant/trainer and as an iPhone owner. It is also based on many conversations with iPhone-toting professionals from many fields. My goal is to provide you with a reference that is part how-to book, but also takes each feature of the iPhone (including some of the more consumer-oriented features, like YouTube and text messaging) and provides practical ways that you can use it in your professional life.

To that end, you'll see a lot of basic iPhone knowledge to get you started. You'll also see the occasional quote from iPhone users highlighting helpful business uses for specific features, as well as tips and sidebars that offer suggestions on more detailed ways that you can use the iPhone for professional networking, task management, daily work-related tasks, and professional development. Even if you know a lot of the basics about the iPhone, each chapter probably has some helpful tidbit, regardless of your field or industry.

In Part 1 of this book, I'll cover all the basic things you need to know about purchasing, activating, and getting started with your iPhone. In Part 2, you'll learn all the details about the built-in applications that come with the iPhone (both how to use them and how use them in business settings). Part 3 covers the App Store, where you can find and purchase an amazing array of business and productivity tools (and a lot of apps that are just plain fun—after all, the iPhone is a fun device to use).

In addition to introducing you to the App Store, the final part of this book provides an introductory guide to many business applications for the iPhone. This includes general tools that can be helpful for almost any iPhone-owning professional and any type of business. It also includes guides to applications that are helpful for people in specific professions such as doctors, lawyers, real estate agents, and teachers.

At the end of this book, you'll have a clear idea of how to use your iPhone and how to apply it to your specific career and job needs. But, as I note more than once in Part 3, the range of applications is always growing, and Apple is continuing to push the iPhone forward with new features and capabilities. So, while this book will be a great starting point for your iPhone-enabled career, it is just that—a place to get started—because I have no doubt that Apple and third-party iPhone developers will expand the potential of the iPhone for business users and consumers alike.

P A R T 1

iPhone Basics

Buying and Activating Your iPhone

Getting Ready to Get Down to Work with the iPhone

The iPhone may be generally considered a consumer device, but Apple has built an incredible amount of professional and business-grade features into it, including access to Microsoft Exchange and other industry collaborative tools (messaging, calendar, and contacts), as well as secure and on-demand access to remote network resources—each of which we'll explore throughout this book. In this first chapter, however, let's focus on the immediate questions that you'll need to know when you go to the store to pick out your iPhone, and when you come home, activate it for use and sync data between it and your computer for the first time.

iPhone Models and the iPod touch

Compared to some smart phone platforms, the iPhone is probably the simplest platform to understand when making a purchase. Apple has kept the iPhone lineup very streamlined, and it currently includes only two shipping models: the iPhone 3G (originally introduced in July 2008) and the newer iPhone 3GS (introduced in June 2009). A third model, the original iPhone introduced in July 2007, is no longer being produced by Apple (though used models continue to be available). Although all three models run the same software and are functionally very similar, there are notable differences between them.

The iPhone 3GS

Introduced in June 2009, the iPhone 3GS (Apple has described the S in the name as being for "speed") is the most recent iPhone model. Although it has the same design and interface elements as the other two models, it offers notably better performance for many tasks due to a faster processer and more built-in memory than either of the earlier

models (which were functionally very similar). As a result, operations such as launching applications, rendering web sites, and loading graphics-intense application data are on average two to three times faster on an iPhone 3GS (though Internet access performance may still be limited by the type of Internet connection).

In addition to the increased speed, the iPhone 3GS boasts a few other hardware upgrades over previous models. It includes a higher-resolution camera (3 megapixels to the 2-megapixel camera on both previous models) that includes autofocus capabilities, performs better in low-light situations, and has the ability to shoot video as well as still images. The iPhone 3GS also includes a built-in electronic compass that allows it to determine which way the device is pointed, and offers navigation features beyond the iPhone 3G's GPS-only navigation (the original iPhone didn't ship with any built-in GPS capabilities). It also boasts improved battery life over previous models.

As of this writing, the iPhone 3GS is available in 16GB and 32GB storage capacities with either a black or white case. The storage in the iPhone is not upgradable—which means that if you choose the smaller model and outgrow its capacity, you'll need to either pare down the amount of data stored on it or completely upgrade to a new, larger phone.

The iPhone 3G

The iPhone 3G, which Apple continues to produce in an 8GB capacity (originally it was available in both 8GB and 16GB versions), offers a half-price alternative to the iPhone 3GS. Although it offers slower overall performance, the iPhone 3G is still adequate for most tasks. Like the iPhone 3GS, it can connect to modern 3G mobile networks for Internet access, though the iPhone 3GS supports a somewhat faster version of 3G networking that is not currently available via AT&T (the sole US carrier of the iPhone). In fact, the majority of built-in and third-party applications function the same on both models.

As a result of the hardware differences between the iPhone 3G and iPhone 3GS, however, some additional features are not available. As noted, this includes the compass and certain camera features. It also means that some software features, such as the ability to use Apple's built-in voice control and voiceover (which allows the iPhone 3GS to speak feedback to the user) are not available.

One feature only available on the iPhone 3GS that should be noted for business users is the ability to fully encrypt all data on the device. This adds a significant layer of security to the iPhone 3GS because even if the device is lost or stolen, retrieving data from a fully encrypted and passcode-protected device is virtually impossible without knowing the passcode. Unencrypted devices can often be accessed by someone with the proper tools and forensic skills even if they are protected by a passcode.

The Original iPhone

This iPhone 3G and 3GS are currently the only iPhone models available, the original iPhone (also sometimes called the 2G or 2.5G iPhone, or the first-generation iPhone)

may be found used or refurbished from private resellers. The original iPhone cannot make use of 3G mobile networks and must rely on the older (and significantly slower) EDGE technology for data services like web browsing or sending and receiving e-mail. The iPhone 3G (as you might guess from the name) was designed to function with the newer 3G technology to offer much faster data performance. Since 3G networks are not deployed everywhere (particularly in rural areas), the iPhone 3G and 3Gs will still function with EDGE networks if needed.

Another big difference between the original iPhone and the iPhone 3G and iPhone 3GS is the inclusion of a GPS antenna in the iPhone 3G. GPS (global positioning system) is a network of 16 satellites that GPS devices (including the iPhone 3G) can rely upon to acquire an accurate location anywhere on the earth. Typically GPS is accurate to within a few feet.

GPS is a major feature of the iPhone 3G and iPhone 3GS, and is used in a wide range of applications by Apple, Google, and other developers. While the original iPhone lacks GPS capabilities, it can access some location services by triangulating its distance from the cellular towers to which it is connected at any given time, and by using a global database of known Wi-Fi hotspots (known as Skyhook). The results are often far less accurate than GPS, and the degree of accuracy can vary from a few yards to a mile or more. As with 3G networking, the iPhone 3G and iPhone 3GS can also use these technologies to plot their locations if they cannot acquire signals from GPS satellites (such as when inside many older brick buildings—such structures can also impede network performance, though of the various technologies in any iPhone model, GPS is the most easily blocked).

The iPod touch

While not an iPhone, the iPod touch runs the same operating system software and many of the same applications as the iPhone. This means that, even though the iPod touch cannot be used as a phone, it can still function as an Internet-enabled business device. An iPod touch can be used for e-mail, web browsing, maintaining calendar and contact data, and viewing media files (music, photos, videos, and podcasts), and can work with the vast majority of iPhone applications. The primary limitations of the iPod touch are that it cannot make or receive phone calls and it must rely on Wi-Fi hotspots or networks to access the Internet (unlike the iPhone, which can rely on a mobile carrier's data network). The iPod touch also lacks the camera built into the iPhone.

TIP: Although the iPod touch cannot make calls using a wireless carrier, Voice over IP (VoIP) applications including Skype, Truphone, and fring are available from Apple's App Store that can be used with the iPod touch to make phone calls over the Internet when connected to a Wi-Fi network. However, you will need to purchase a separate headset with a built-in mic in order to use these apps, as the iPod touch doesn't include a built-in mic.

These may be somewhat significant limitations for some professionals, but the iPod touch has a couple of things to chalk up in its favor. The device is available in 8GB, 32GB, and 64GBstorage capacities and it does not require you to sign an extended service agreement or even purchase service with AT&T (or another carrier outside the United States). Depending on your needs or the options available at your company, an iPod touch coupled with a more traditional phone may be a viable option.

Since the iPhone an iPod touch are very similar, you will be able to apply the majority of information in this book to either device. I will make note, however, of features that are specific to the iPhone that will not apply to the iPod touch.

Understanding iPhone Activation and Rate Plans for Individuals and Businesses

If you are purchasing an iPhone as an individual, you can do so directly from the carrier (AT&T in the United States), an Apple retail store, or another retailer (such as Best Buy or Wal-Mart). This is because the actual full cost of the iPhone is subsidized by the carrier, who sells the iPhone to you at a reduced rate that

has been negotiated with Apple as part of its agreement to support and sell the iPhone.

The fully subsidized cost is \$199 for the 16GB iPhone 3GS or \$299 for the 32GB model (some retailers, such as Wal-Mart or Best Buy, may further reduce the cost, though major markdowns are rare because of the terms between Apple and retailers). The fully subsidized price for the 8GB iPhone 3G is \$99, representing a notable cost savings. The cost outside the United States may vary, as may the contract terms depending on local laws and the agreements that Apple has made with other carriers. This subsidized pricing actually drops the initial purchase cost of the iPhone below the retail pricing for the iPod touch (the entry-level model of which sells for \$199).

Regardless of where you purchase and activate your iPhone, the process will be similar. If you are an existing customer of AT&T, you may be eligible to receive the iPhone at these prices, or you may be asked to pay more depending on your upgrade eligibility—this is determined by how long it has been since you last signed a new contract with the carrier.

AT&T, like most wireless carriers, will offer you subsidized pricing only a periodic basis, as this helps ensure that you will either remain a customer long enough to repay the investment in subsidizing the cost of your phone or be forced to pay an early termination fee. You can check your upgrade eligibility by calling the carrier or checking your account status online.

You can also choose to buy an unsubsidized iPhone 3GS, though the costs are much steeper, with models selling for \$599 (16GB) and \$699 (32GB)—and may not be worth avoiding the two-year commitment in countries such as the United States, where there is only a single exclusive carrier from whom you can purchase service.

If you are a new customer, you'll need to sign a contract, you'll be subject to a credit check, and photo ID will be required. At this time, AT&T doesn't offer the ability to

purchase and activate an iPhone using a pay-as-you-go account (though this may vary in other countries). You will have the option of porting your current phone number to your new iPhone or activating the iPhone with a brand-new number.

With the paperwork done, your iPhone may be activated by the retailer using iTunes in the store, or you may be asked to activate the iPhone at home or the office by connecting it to iTunes (as illustrated in Figure 1-1). In addition to being a media player and online media store, iTunes is the primary tool for managing the iPhone. If you purchase an iPhone in an Apple store, it will likely be activated using iTunes on one of the demo Macs throughout the store. Other retailers will typically use a stripped-down/activation-only version of iTunes on their store point-of-sale computers. In either case, this initial connection serves only to activate the phone, and no information is actually synced to it.

TIP: The same activation process occurs in iTunes on your computer as in the store. In fact, if your iPhone needs to be restored (completely erased) as part of troubleshooting, you will also be asked to activate it through iTunes after the restore, answering basic questions about your wireless account.



Figure 1-1. Activating an iPhone using iTunes

Consumer vs. Business Rate Plans

The rate plans associated with the iPhone will vary by country and carrier. In the United States, AT&T draws distinctions between business and consumer plans. If you are purchasing an iPhone for a small business or a larger enterprise environment, you will need to purchase directly from AT&T. There are a number of plan options for businesses, but the majority are similar to the plans available to consumers. Business consultants within AT&T can help you assess your business needs.

If you are purchasing an iPhone as an individual, you will be asked to choose both a data plan (required with iPhone activation) and a voice plan. AT&T has provided several iPhone-specific plans that include both the required 3G data plan (which includes unlimited data transfer for \$30/month) and voice plans. If you are activating an iPhone as part of a family plan, you may want to investigate what options are available in terms of family plans that share minutes, as it is possible to choose from AT&T's more general voice and feature plans and simply add the iPhone data plan to it. The same is true for businesses that include both iPhones and other phone models.

If you are activating a used or existing original iPhone as an additional line on the same account as an iPhone 3G or iPhone 3GS, be sure to fully investigate the options and compare the costs of shared-minute plans and traditional independent line plans. The original iPhone requires a different \$20/month EDGE data plan that includes unlimited text messaging (the iPhone 3G data plan does not). As a result, comparing the combination of plans is important because the costs can vary based on the type of plan you choose. Likewise, if you are activating an iPhone on a family or business plan with other types of phones, you should investigate all the plan options before making a decision. In this respect, purchasing from an AT&T store or business consultant can be useful because they are typically more familiar with certain options, and may be able to offer options that other retailers cannot.

Getting Used to iTunes As the Hub of Your Personal and Business Data

Over the years, Apple has turned the iTunes media application from a simple music jukebox into a repository for all types of digital media and a hub for managing devices like the iPhone and iPod. Managing your business life (as well as your music, movies, and podcasts) through iTunes may be one of the strangest concepts for professional users to accept about the iPhone. Conceptually, it isn't that much different from other multifunction applications, including Microsoft's Outlook, which combines e-mail, calendars, and personal folders, but the very name iTunes doesn't immediately conjure up the word *professional* in most people's minds.

Nonetheless, that's where management of iPhone data primarily takes place. Whether or not you use iTunes for listening to music or watching movies and TV shows, you'll need it as a place to manage your iPhone. This is the place where you update your iPhone's software, download and install third-party applications, choose which contacts and calendars to sync, purchase or install ringtones, and (of course) choose what music,

photos, and videos you want to put on the iPhone. iTunes is also charged with backing up the contents of your iPhone every time it syncs (including things like settings and text messages, which are included in the backup process even though you never see them in iTunes itself).

What If the IT Department Made Your Life Easier by Preconfiguring Your iPhone?

Being a device that is designed for both end users and business customers, the iPhone supports some preconfiguration by IT departments. This configuration is done through the use of special files called *configuration profiles*, which are created using Apple's iPhone Configuration Utility. Configuration profiles can be installed on the iPhone by IT staff directly or sent to the iPhone via e-mail or a weblink. Appendix A discusses some of the details about how to perform preconfiguration of one or multiple iPhones using configuration profiles created using Apple's iPhone Configuration Utility. (Additional information can be found in Apple's iPhone Enterprise Deployment Guide, which is available online at http://manuals.info.apple.com/en_US/Enterprise_Deployment_Guide.pdf.)

If you have received your iPhone from your company's IT department, you may find that many of the options for the device have been preset for you. This level of preset can vary. For example, you might receive an iPhone that is completely preconfigured with Wi-Fi networking, as well as all your user information, shared contacts, and calendar servers already on it. Or your iPhone might simply be activated with a basic e-mail server (but no username or password information) being prepopulated. You may also find that your IT department has set some access restrictions on your iPhone. These might include things such as the requirement of a passcode to unlock the iPhone, the ability to purchase content from the iTunes Store, or disabling of your ability to use some applications (such as YouTube, Safari, or the built-in camera). If your iPhone has arrived in such a preconfigured state, you should ask the IT staff member providing it about what features have been configured, which ones you may need to configure yourself, and any security restrictions that have been imposed.

IT can also update the configuration and security settings on the device by updating the configuration profiles after you receive your iPhone. When this happens, you will typically receive an e-mail from an IT staff member with an attachment that contains the new profile. Opening the attachment will cause the iPhone to ask if you want to install it (doing so may overwrite some or all of the settings in place from an existing profile). Similarly (and somewhat more securely), IT may direct you to load a profile from a company web server by going to an appropriate web page using the Safari web browser on you iPhone.

Typically, you will want to install these updates, as they probably relate to your ability to access your company's network. However, you may wish to confirm with a staff member that the updates are genuine, and what settings the updates will change, before installing them. Although there is little chance of malicious damage to the iPhone from

configuration profiles, they can affect your ability to access a variety of features, including corporate Wi-Fi networks and e-mail servers. Also, they may implement new security restrictions, though they will typically not affect your ability to sync data or content through iTunes (the exception being the ability of configuration profiles to block access to content in iTunes that is flagged as explicit or adult).

Initial Setup and First Sync

After initial activation, you'll be able to use your iPhone to make calls. You'll also be able to launch any of the built-in applications, including the Safari web browser and the Mail e-mail application. The real power of the iPhone, however, comes after you've activated the phone and connected it to your computer for the first time.

When you first connect the iPhone to your Mac or PC (after downloading the latest version of iTunes from www.apple.com/itunes, or using the software update feature in Mac OS X's System Preferences or the Windows Control Panel if iTunes is already installed), you'll be asked to identify or name your new iPhone and confirm the carrier and account information (such as phone number) associated with it, as shown in Figure 1-2. If you've already synced an iPhone to a computer, it may ask if you want to restore the new iPhone from backup (unless you're troubleshooting a problem after restoring or replacing an iPhone, say no).

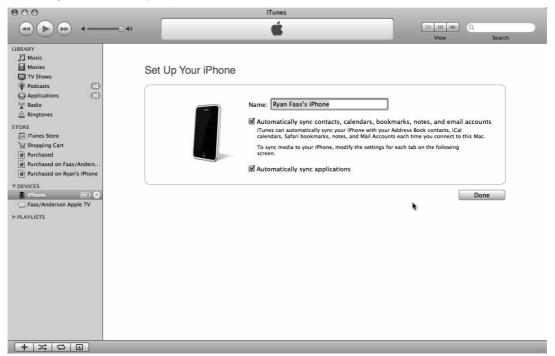


Figure 1-2. Initial iPhone setup in iTunes

Once this is complete, you'll see the iPhone appear in the iTunes sidebar (see Figure 1-3). Select the iPhone in the Devices section of the sidebar, and then you'll be able to view information about the iPhone and choose what information you want to sync to it. As you can see, there are eight tabs available in iTunes for managing the iPhone:

- Summary
- Info
- Ringtones
- Music
- Photos
- Podcasts
- Video
- Applications



Figure 1-3. The iPhone Summary pane in iTunes

Regardless of which of these tabs you're looking at, you'll see a Sync button in the lower-right corner of the window, which allows you to update your iPhone with any changes you've made to settings or content immediately. You'll also always see a bar along the bottom of the display that illustrates the amount of storage space available on your iPhone and how much of it is currently being taken up by different types of data (such as music, photos, video, and application files).

The Summary Pane

I'll look through each of these panes at various points throughout this book as I discuss specific features of the iPhone. For now, the important two to look at are the Summary pane and the Info pane. The Summary pane (shown previously in Figure 1-3) provides you with general status information about your iPhone, including the name, serial number, operating system software version, overall storage capacity (this may be listed as smaller than the actual capacity because it represents the available capacity after the device has been formatted to accept data), and phone number.

There are also a handful of options, including a button to update the installed iPhone software. Apple periodically issues updates to the iPhone (and iPod touch) operating system software that add new features and/or fix known problems. iTunes will check for new iPhone software automatically once a month (and will display the date of the next check on this pane). You can manually check for and update software using this button at any time.

Another button allows you to restore the iPhone. Restoring an iPhone is most commonly done as a troubleshooting step. The entire contents of the iPhone (operating system software, applications, data, and settings) are erased, and the most recent version of the iPhone software is loaded onto the device—effectively restoring it as if it were a brandnew phone. This process can also be performed if you want to give or sell your iPhone to someone else and remove any content first.

The final options on the Summary pane allow you to control the sync process. You can choose to have your iPhone sync automatically whenever it is connected to your computer or only when you click the Sync button in iTunes. Automatic syncing ensures that your iPhone's contents remain current, but it can get bothersome if you are only plugging your iPhone in to charge it through your computer's USB port.

You also have an option to sync only checked songs and videos. If you have songs or videos in iTunes that you don't want synced to your iPhone (either because of the content or simply to save space), you can select this option. You can then deselect the check box next to those items that you don't want to sync in your library (select the Music, Movies, or TV Shows items in the sidebar to view your library).

Finally, you can choose to manually manage music and videos on your iPhone. When this option is selected, iTunes will not sync any music, movies, or TV shows to your iPhone (even if you click the Sync button). Instead, you will need to drag and drop individual songs, albums, movies, audio books, TV shows, podcasts, or playlists onto the iPhone's icon in the sidebar to copy them to it.

With this option, iTunes will treat your iPhone almost as if it's a playlist—allowing you to add and remove content whenever you like (though new purchases or downloads will not automatically be copied to the iPhone). This option is particularly helpful if you regularly attach your iPhone to more than one computer, as you can copy media from multiple iTunes libraries to a single iPhone (though all those computers will need to be associated with a single iTunes Store account to play protected content from the iTunes Store).

The Info Pane and Where iTunes Finds Your Information

Your iPhone can store and sync a variety of personal and professional data. Some of that data resides in iTunes itself—namely music, movies, TV shows, and podcasts. Other data resides elsewhere on your computer and is typically stored or managed by other programs. Although iTunes will be the tool that you use to manage the iPhone, it will act as a gatekeeper rather than a source for most professional information, including e-mail accounts, contacts, and calendars.

The Info pane in iTunes (shown in Figure 1-4) determines what non-iTunes data is synced with your iPhone. You can choose to sync contacts, calendars, e-mail accounts, and web browser bookmarks. In many ways, syncing this data from your computer makes setup of services on the iPhone extremely simple (particularly for e-mail accounts) because iTunes will prepopulate everything based on how your computer is set up.



Figure 1-4. Choosing what to sync using the Info pane for an iPhone in iTunes under Mac OS X

Mac OS X

Since Mac OS X and Windows differ slightly in terms of what applications store information, we'll look at each separately. If you are using a Mac, iTunes will sync contacts to your iPhone (which include people's names, phone numbers, e-mail addresses, physical mail addresses, and similar information) from Mac OS X's Address