

Chapter 1: iTunes — the Digital Jukebox

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- ✓ Starting iTunes
- ✓ Playing music tracks
- ✓ Setting visual effects
- ✓ Perfecting the sound
- ✓ Shopping for music online
- ✓ Importing into iTunes
- ✓ Listening to Web radio streams

More than half a century ago, jukeboxes were the primary and most convenient way for people to select the music they wanted to hear and share with others, especially newly released music. Juke joints were hopping with the newest hits every night; however, you still had to insert coins every time you played a song. Possibly, you could afford records and a turntable, but you had to throw a party to share the music with others.

Today, using a computer, you can create a digital jukebox and conveniently click a button to play a song. Connect your Mac to a stereo amplifier in your home, or connect speakers to your Mac, and suddenly your Mac is the best jukebox in the neighborhood.

You can listen to a new song on the Internet and download it immediately. You can also buy music online at the Apple Music Store. iTunes downloads music from the store and puts it in your library, making it immediately available for playing, burning onto a CD, or transferring to an iPod. You can even listen to Web radio stations using iTunes and define your favorite stations.

Transferring songs from CD to your computer is called *ripping a CD* (to the chagrin of the music industry old-timers who think we intend to destroy the disc or steal the songs). Ripping an entire CD's worth of songs is quick and easy, and track information including artist name and title arrives automatically over the Internet.

10 *Setting Up iTunes*

iTunes gives you the power to organize songs into playlists and burn (or record) CDs of any songs in your library, in any order. You can even set up dynamic smart playlists that reflect your preferences and listening habits. iTunes offers an equalizer with preset settings for all kinds of music and listening environments, and the ability to customize and save your own settings with each song.

This chapter explains how iTunes changes your music playing and buying habits for the better. You'll be able to preserve your music virtually forever without any loss in quality, and use your music in a variety of creative projects made possible by iLife.

Setting Up iTunes

You need to set up iTunes to use with your Internet connection. This happens automatically when you first start iTunes. Follow these steps:

1. Launch iTunes.

Double-click the iTunes application, or click the iTunes icon in the Dock. If this is the first time, the Setup Assistant wizard appears.

2. Click Next.

The Setup Assistant takes you through the process of setting up iTunes for the Internet.

3. Click Yes or No for the following options:

- **“Yes, use iTunes for Internet audio content,” or “No, do not modify my Internet settings”**

We suggest clicking Yes, allow iTunes to handle audio content, because iTunes offers more features than you typically find with browser plug-ins from other companies. On the other hand, if you are happy with your plug-ins and helper applications, you can click No and leave your Internet settings untouched.

- **“Yes, automatically connect to the Internet,” or “No, ask me before connecting”**

If you use an *always-on* broadband Internet service, you probably want iTunes to connect automatically, and you can click Yes. If you use a modem, if your Internet service is intermittently off, or if your Internet service charges when you use it, you probably *don't* want this connection to be automatic — you can set iTunes to ask first.

The Setup Assistant also asks if you want iTunes to search your home folder for music files. You may want to click the No button for

now, because iTunes may find files you don't want to add to your library (such as music for games). The Setup Assistant also asks if you want to go straight to the Apple Music Store.

4. In the Setup Assistant window, click Done.

The iTunes window appears, as shown in Figure 1-1.



Figure 1-1:
Launching
iTunes.



TIP If your computer shares a phone line or you pay Internet connection charges by the minute, you probably don't want to connect automatically. If you're modem-bound, you may not want your modem to make a phone call every time you slip a CD into the computer. On the other hand, if your Internet cost isn't based on usage and you're always connected, connecting iTunes automatically is convenient.

Whether or not you set iTunes to automatically connect to the Internet, you should at some point connect to the Internet with iTunes, not only to buy music online and listen to Web radio, but also to retrieve the track information every time you insert a CD new to iTunes so you don't have to type the information yourself.

Playing CD Tracks

To start playing music, just insert any commercial music CD, or even a CD-R disc that someone else may have burned for you. The music tracks appear in the iTunes song/detail list, as shown in Figure 1-2.

12 *Playing CD Tracks*

You can play CDs without importing the music to your iTunes library if you want to use iTunes as a CD player only. To find out how to get digital music online or import music from CDs, see the sections, “Buying Music Online from Apple” and “Importing into iTunes,” later in this chapter.

Figure 1-2:
The tracks
of an
audio CD.



If your Mac is connected to the Internet, iTunes presents the track information from the Internet for each song automatically after you insert the CD, as shown in Figure 1-3.

To play a track on the CD, click the track name, and then click the Play button. The Play button turns into a Pause button and the song plays.

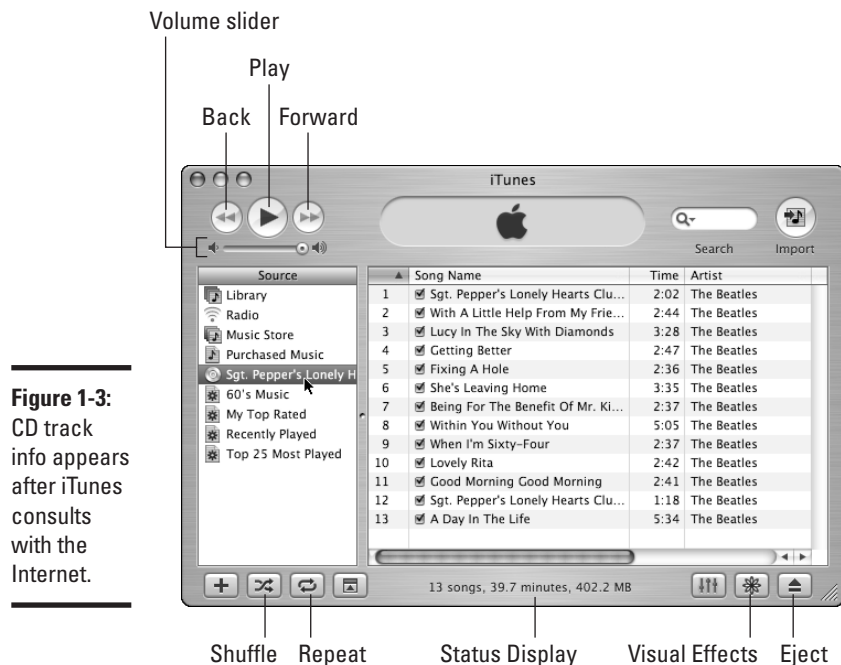
When the song finishes, iTunes continues playing the songs in the list in sequence until you click the Pause button (which turns back into the Play button). You can skip to the next or previous song using the arrow keys on your keyboard, or by clicking the Forward or Back button next to the Play button.



The status display above the list of songs tells you the name of the artist and song (if known), and the elapsed time. If you click the Elapsed Time status, the status changes to the remaining time and then, with another click, to the total time (one more click brings you back to the elapsed time).

Rearranging and repeating tracks

You can rearrange the order of the tracks to automatically play them in any sequence you want — similar to programming a CD player. Click the upward-pointing arrow at the top of the first column in the song list, and it changes to a downward-pointing arrow, with the tracks in reverse order.



You can change the order of tracks played in sequence. Just press and hold the mouse button on the track number in the first column for the song, and drag it up or down in the list. You can set up the tracks to play in some completely different sequence.

Skipping tracks

To skip tracks so they don't play in sequence, click the box next to the song name to remove the check mark. Unselected songs are skipped when you play the entire sequence.



To remove a series of check marks simultaneously, hold down the \mathbb{A} key while clicking a check mark.

Repeating a song list

You can repeat an entire song list by clicking the Repeat button at the bottom of the Source list on the left side of the iTunes window (or by choosing Controls ⇨ Repeat All). Click the Repeat button again to repeat the current song (or choose Controls ⇨ Repeat One). Click it once more to return to normal playback (or choose Controls ⇨ Repeat Off).

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The Shuffle button, to the left of the Repeat button, plays the songs in the list in a random order, which can be fun. You can then press the arrow keys or the Back or Forward button to jump around in random order. Eject a CD by clicking the Eject button or by choosing Controls⇨Eject Disc.

Displaying Visuals

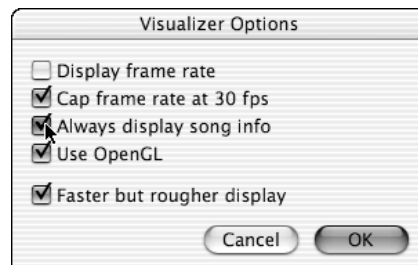
Visual effects can turn your Mac display into a lightshow for your amusement. You can watch a cool visual display of eye candy while the music plays — or leave it on like a sixties-style lava lamp. Click the Visual Effects button on the bottom right side of the iTunes window (or choose Visualizer⇨Turn Visualizer On). The visual animation appears in the iTunes window and coordinates with the music.

In addition to the animation replacing the iTunes song list, an Options button replaces the Import button in the upper-right corner of the iTunes window. You can click the Options button to open the Visualizer Options dialog box, as shown in Figure 1-4.

The Visualizer Options dialog box offers the following options that affect the animation but not the performance of iTunes playing music:

- ◆ **Display frame rate:** Displays the frame rate of the animation along with the animation.
- ◆ **Cap frame rate at 30 fps:** Keeps the frame rate at 30 fps or lower, which is the speed of normal video.
- ◆ **Always display song info:** Displays the song name, artist, and album for the song currently playing, along with the animation.
- ◆ **Faster but rougher display:** The animation plays faster, with rougher graphics. Choose this option if your animation plays too slowly.

Figure 1-4:
Set your
options
for visual
effects.



The Visualizer menu in iTunes gives you even more control over visual effects. You can choose Visualize⇨Small or Visualize⇨Medium to display the visual effects in a rectangle inside the iTunes window, or Visualize⇨Large to fill the iTunes window. Choosing Visualize⇨Full Screen sets the visual effects to take over the entire screen. With full-screen visual effects, you can click the mouse or press the Escape key on your keyboard to stop the display and return to iTunes.

While the animated visual effects play, press Shift+slash (as in typing a question mark) to see a list of keyboard functions. Depending on the visual effect, you may see more choices of keyboard functions by pressing Shift+slash again.

To turn off visual effects, click the Visual Effects button again. You can leave the effects on (except when in full-screen mode) even while opening the equalizer, because you still have access to the playback controls. See the following section to find out how to change the equalizer settings.

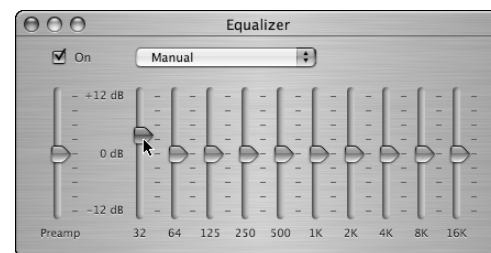
Fine-Tuning the Sound

The jumping-bar displays you see on audio equipment are in most cases equalizers. An equalizer (EQ in audiospeak) enables you to fine-tune the specific sound spectrum frequencies. Adjusting bass and treble controls on a radio or stereo are simply cruder ways of adjusting these frequencies. An equalizer gives you far greater control over specific frequencies.

Using an equalizer preset

To see the iTunes equalizer, click the Equalizer button, on the bottom right side of the iTunes window. The Equalizer window appears, as shown in Figure 1-5. Chapter 3 of this book provides more details on enhancing the sound with the iTunes equalizer.

Figure 1-5:
Use an
equalizer
preset.



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You can select one of the preset values from the pop-up menu or adjust the frequencies manually by dragging the sliders up and down, just like a professional mixing console. We describe in detail how to use the equalizer in Chapter 3 of this book.

Cross-fading and controlling volume

You can fade the ending of one song into the beginning of the next one to slightly overlap songs, just like a radio DJ. Ordinarily, iTunes is set to have a short cross-fade — a short amount of time between the end of the fade in the first song and the start of the fade in the second song.

You can change this cross-fade setting by choosing iTunes⇨Preferences and then clicking the Effects button. You can turn the Crossfade Playback option on or off, and increase or decrease the amount of the cross-fade.

You can also adjust the volume for all the songs at once by sliding the volume slider in the upper-left section of the iTunes window. The maximum volume of the iTunes volume slider is the maximum set for the computer's sound in the Sound pane of System Preferences.

To adjust the volume of a particular song, click a song to select it, and then choose File⇨Get Info. In the Get Info dialog box, click the Options tab, and then drag the Volume Adjustment slider left or right to adjust the volume.

Some CDs play more loudly than others, and occasionally, individual tracks within a CD are louder than others. To ensure that all the songs in your library play at the same volume level, follow these steps:

- 1. Choose iTunes⇨Preferences.**

The Preferences window appears.

- 2. Click the Effects button.**

- 3. Select the Sound Check check box.**

iTunes sets the volume for all songs according to the level of the slider.

Buying Music Online from Apple

When Apple announced its new music service, Apple chairman Steve Jobs remarked that other services put forward by the music industry tend to treat consumers like criminals. Steve had a point. Many of these services cost more and add a level of copy protection that prevents consumers from burning CDs or using the music they bought on other computers or portable MP3 players.

Apple did the research on how to make a service that worked better and was easier to use, and forged ahead with the Apple Music Store. By all accounts, Apple has succeeded in offering the easiest, fastest, and most cost-effective service for buying music for your Mac and iPod.

Visiting the Apple Music Store

As of this writing, the Apple Music Store offers more than 200,000 songs, with most songs \$.99 each, and entire albums available at far less than the price you pay for the CD. You can play the songs on up to three different computers, burn your own CDs, and use them on players such as the iPod.

You can preview any song for up to 30 seconds, and if you already established your account, you can buy and download the song immediately. We don't know of a faster way to get a song.

To use the Apple Music Store:

1. Click the Music Store option in the Source list.

The Music Store front page appears (see Figure 1-6), replacing the iTunes song list. The page lets you check out artists and songs to your heart's content, although you can't buy songs until you sign into a Music Store account. You can use the Choose Genre pop-up menu to specify music genres, or click links for new releases, exclusive tracks, and so on — just like any music service on the Web.

Figure 1-6:
The Music
Store front
page.



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2. Click the **Sign In** button on the right to create an account or sign in to an existing account.

You need an account (with a credit card) to buy music. iTunes displays the account sign-in dialog box, as shown in Figure 1-7.



If you already set up an account in the Apple Store, you're halfway there. Skip Step 3 and type in your Apple ID and password. Apple remembers the information you put in previously, so you don't have to re-enter it. If you forgot your password, click the **Forgot Password?** button, and iTunes provides a dialog box to answer your test question. If you answer correctly, your password is then e-mailed to you.

Figure 1-7:
Signing into
the Apple
Music
Store.

3. To create an account, click the **Create Account** button.

iTunes displays a new page, replacing the iTunes front page, with an explanation of steps to create an account, and the terms of use.

4. Click the **Agree** button, and fill in your personal account information.

iTunes displays the next page of the setup procedure, which requires you to type your e-mail address, password, test question and answer (in case you forget your password), birth date, and privacy options.

5. Click **Continue** to go to the next page of the account setup procedure, and enter your credit card information.

Enter your personal credit card information. The entire procedure is secure, so you don't have to worry. The Music Store keeps your information on file and you don't have to type it again.

6. Click **Done** to finish the procedure.

Previewing a song

You may want to listen to a song before buying, or just browse the Store listening to song previews. Each preview lasts about 30 seconds. When you

select an artist or a special offering, the browser window divides and gives you a list of songs you can select to play a preview, as shown in Figure 1-8.

The previews play on your computer off the Internet in a stream, so there may be a few hiccups in the playback.

Buying and playing songs

With an account set up, you can purchase songs and download them to your computer. Select a song and click the Buy button at the far right of the song (you may have to scroll your iTunes window horizontally). The store displays a warning to make sure you want to buy the song, and you can either go through with it or cancel. The song downloads automatically and shows up in your iTunes song list. Purchased songs also appear in a Purchased Music playlist in the iTunes library.

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Figure 1-8:
Previewing
songs online
in the Apple
Music
Store.



If for some reason your computer crashes or you quit before the download finishes, iTunes remembers to continue the download when you return to iTunes. If for some reason the download doesn't continue, choose **Advanced** → **Check for Purchased Music** to continue the download.

You don't have to use the 1-Click technology. You can instead add songs to a shopping cart in the store, to delay purchasing and downloading until you're ready. If you decide on the shopping cart method, the Buy button for each song changes to an Add Song button. When you're ready to purchase everything in your cart, click the Buy Now button to close the sale and download all the songs at once. To switch from 1-Click to a shopping cart, check out the section, "Setting the Music Store preferences."

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All sales are final. If your computer's hard disk crashes and you lose your information, you also lose your songs — you have to purchase and download them again. But you can mitigate this kind of disaster by backing up your music library, which we describe in detail in Chapter 2 of this book. You can also burn your purchased songs onto an audio CD, as we describe in Chapter 4 of this book.

Handling authorization

The computer you use to set up your account is automatically authorized by Apple to play the songs you buy. Fortunately, the songs aren't locked to that computer — you can copy them to another computer and play them from within the other computer's iTunes program. When you first play them, iTunes asks for your Apple Music Store ID and password in order to authorize that computer. You can authorize up to three computers at a time. If you want to add a fourth computer, you can deauthorize a computer by choosing **Advanced** ⇨ **Deauthorize Account**.

After you set up an account, you can sign into the Music Store at any time to buy music, view or change the information in your account, and see your purchase history. To see your account information and purchase history, click the **View Account** link in the store after signing in with your ID and password. Every time you buy music, you get an e-mail from the Apple Music Store with the purchase information.

Setting the Music Store preferences

Your decision to download each song immediately or add to a shopping cart and download later will likely be based on how your computer connects to the Internet. If you have a slow connection, you probably want to use the shopping cart method.

You can change your preferences with the Apple Music Store by choosing **iTunes** ⇨ **Preferences**, and in the Preferences window, clicking the **Store** button at the top of the window. The Store Preferences window appears, as shown in Figure 1-9. The Store Preferences window enables you to change from **1-Click to Shopping Cart** or vice-versa. You also have a choice of playing songs after downloading, and loading a complete song preview before playing the preview. This last option provides better playing performance (fewer hiccups) with previews over slow Internet connections.



If you use more than one computer with your account, you can set the preferences for each computer differently while still using the same account. For example, your store-authorized home computer may have a faster connection than your authorized PowerBook on the road, and you can set your iTunes preferences accordingly.

Figure 1-9:
Setting your
preferences
for the
Apple
Music
Store.



Importing into iTunes

To immortalize your music, you need to import it into iTunes from your audio CDs and other sources. After you put music into the iTunes library, you can preserve it forever. You can make backup copies with perfect quality.

Importing from a CD is called *ripping* a CD. We're not sure why it came to be called that, but Apple certainly took the term to a new level with an ad campaign for Macs a while back that featured the slogan "Rip, Mix, Burn." Burning was the hip thing to do a few years ago. Now, you only have to rip and mix — with an iPod, burning CDs to play your music wherever you go isn't necessary.

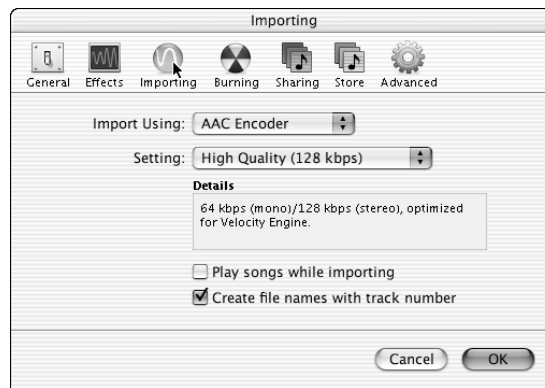
Ripping, in technical terms, is the process of compressing the song's digital information and encoding it in a particular sound file format. The ripping process is straightforward, but the settings you choose for importing affect sound quality, disk space (and iPod space), and compatibility with other types of players and computers. Chapter 3 of this book provides an in-depth look at these encoders and quality settings; for now, we show you how to do it and provide suggestions for settings.

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Ripping music from CDs

Though importing music from an audio CD takes a lot less time than playing the CD, it still takes time. We suggest that before you rip your first CD, you look at the Importing Preferences window by choosing iTunes⇨Preferences, and then clicking the Importing button at the top of the window. The Importing Preferences window appears, as shown in Figure 1-10.

Figure 1-10:
Check your
preferences
for ripping
CDs.



Note the type of encoding selected in the Import Using pop-up menu and the quality setting in the Setting pop-up menu and consider these options:

- ◆ **Import Using:** Set this to AAC Encoder, which is the same as the format used by the Apple Music Store, or the MP3 Encoder, which is the standard for online music files. The other formats are for higher-quality uncompressed music files. Chapter 3 of this book provides a more in-depth look at these choices.
- ◆ **Setting:** Set this to High Quality for most music. You can change this setting to get better quality or use disk space more efficiently, as we describe in Chapter 3 of this book.

To rip a CD, follow these steps:

1. Insert an audio CD.

The songs appear in your song list as generic unnamed tracks at first. If the track names don't appear in a minute, connect to the Internet and choose Advanced⇨Get CD Track Names.

2. (Optional) Click to remove the check mark next to any songs on the CD that you don't want to import.

iTunes imports the songs that have check marks next to them; when you remove the check mark next to a song, iTunes skips that song.



3. **(Optional) To remove the gap of silence between songs that segue together, select those songs and choose Advanced⇨Join CD Tracks.**

The tracks on many music CDs are separate but the end of one song merges into the beginning of the next song. You don't want an annoying half-second gap between the songs.

To select multiple songs, click the first one, and then hold down the ⌘ key to click each subsequent song. To click several songs consecutively, click the first one and hold down the Shift key and click the last one.

4. **Click the Import button at the top right of the iTunes window.**

The status display shows the progress of the operation. To cancel, click the small x next to the progress bar.

iTunes plays the songs as they import. You can click the Pause button to stop playback. You can also stop the playback by choosing iTunes⇨Preferences and clicking the Importing button. Uncheck the Play Songs While Importing option in the Importing Preferences window.

As iTunes finishes importing each song, it chimes and displays a green check mark next to the song.

5. **Click the Eject button at the bottom right of the iTunes window after all the songs import.**

You can also choose Controls⇨Eject Disc to eject the disc.

Importing music files from other sources

The quality of the music you hear depends on the quality of the source. Web sites and services offering MP3 files vary widely. Some sites provide high-quality, legally derived MP3 songs, and some don't. Anyone can create MP3 files, so beware of less-than-high-quality knockoffs and sites that offer free music.

Some sites offer only streaming audio, just like a Web radio station (described in the "Listening to Web Radio" section, later in this chapter). If you download something that turns out to be just a Web address (a URL), you can still use that with iTunes — a broadcast symbol appears next to the song in your library, just like a Web radio station.

Whether you download the music file or copy it from another hard disk, you need to save it on your hard disk. After you save or copy an MP3 file — or for that matter an AIFF or WAV file — on your hard disk, you can simply drag it into the iTunes window to import it to your library. If you drag a folder or disk icon, all the audio files it contains are added to your iTunes Library. Choose File⇨Add to Library as an alternative to dragging.

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Adding your own pet sounds

No, we're not talking about sounds your pet may have made. We're referring instead to your favorite music or sounds that can't be found on CD or, believe it or not, on the Internet. The ***Pet Sounds Sessions*** box set by the Beach Boys includes just about every spoken word and sneeze in the studio during the recording, and you may have equally unusual sounds or rare music that can't be found anywhere else. How do you get stuff like that into iTunes?

Sound can be imported from almost anywhere:

- ✓ **Internet:** You can import MP3 music files from Web sites by first downloading the MP3 files to your Mac. You can also link to Web radio stations, but you can't capture the songs from Web broadcasts.
- ✓ **Professional editing programs:** You can import high-quality AIFF-format or WAV-format files from music editing programs. These programs typically record from any analog source device, such as a tape player or even a turntable for playing vinyl records.
- ✓ **Any analog source:** You can record music directly into a digital file from the Mac's line-in connector using the Sound Studio program, found in the Applications folder in Mac OS X systems (you can use it for about two weeks before paying for it). You can connect any music source to the line-in connector, including home stereos with turntables for playing vinyl records, or even a microphone for recording live directly

into the Mac. (The Sound Studio program may not be bundled with all systems. You can download an application to check it out at http://www.felttip.com/products/sound_studio/.)

You can import any sound saved in an MP3, AIFF, or WAV sound file, including your own voice recorded to disk using the Mac microphone and a program such as Sound Studio. You may want to create special sound effects to use with photo slideshows in iPhoto, videos in iMovie, or DVD menus in iDVD. You can import the sound effects file once into your iTunes Library, and use it in all three types of projects.

Voice recordings tend to be low-fidelity, so we recommend using the MP3 Encoder with the Good Quality setting (128 Kbps), rather than higher quality settings. Sound effects and voice recordings are typically mono rather than stereo — but you can also select the Custom setting to force the importing to be mono or stereo, as described in Chapter 3 of this book.

To record directly into your Mac from either a home stereo system, or through a microphone (either the Mac built-in microphone, an external microphone that connects to the Mac, or a USB microphone that connects through the Mac USB port), you can use Sound Studio, which is available free for a two-week trial period. For newer Macs that no longer have the line-in connections, you can purchase a USB audio input device, such as the Griffin iMic or the Roland UA-30.



When you add a song to your iTunes Library, a copy is placed inside the iTunes Music folder, which you can view in the Finder. (The iTunes Music folder lives in the Music folder of your Home directory/folder.) The original is not changed or moved. You can then convert the song to another format — for example, you can convert an AIFF file to an MP3 file — while leaving the original intact. We describe converting songs in Chapter 3 of this book.

Importing Audio Books

Do you like to listen to audio books and spoken magazine and newspaper articles? Not only can you bring these sounds into iTunes, but you can also transfer them to an iPod and take them on the road, which is much more convenient than taking cassettes or CDs.

Audible is a leading provider of downloadable spoken audio files. Audible lets you enable up to three computers to play the audio files, just like the Apple Music Store. Audible does require that you purchase the files.

To import Audible files, follow these steps:

- 1. Go to www.audible.com and set up an account if you don't already have one.**
- 2. Choose and download an Audible audio file.**
These are files whose names end with “.aa”.
- 3. Drag the Audible file to the iTunes window.**

If this is the first time you've added an Audible file, iTunes asks for your account information. You need only to enter this information once for each computer you use with your Audible account.

To disable an Audible account, open iTunes on the computer that will no longer be used with the account, and choose **Advanced ⇨ Deauthorize Computer**, and in the Deauthorize Computer dialog box, choose the Deauthorize Computer for Audible Account option, and click OK. Remember that you need to be online to authorize or deauthorize a computer.

Listening to Web Radio

Now you can reach radio stations on the Internet that represent nearly every area of the world. You can tune into RadioNorba for the top 40 hits in Italy, or Radio Retro from Moscow, or AryaLive Radio for Persian, Farsi, and Iranian music and talk radio. Check out the local news and sports from your hometown no matter where you are. Listen to talk radio and music shows from all over the country and the world.

You can't record or save a song from a radio broadcast without special software. But you can add your favorite stations to your music library or to a playlist to tune in quickly and easily. You can also tune in any Web radio or streaming broadcast if you know the Web address.

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Streaming music from the Internet

Apple provides links within iTunes directly to radio stations on the Internet, so you may want to try these first. Follow these steps:

1. Click the Radio option in the Source list.

The iTunes window displays a list of categories of radio stations, as shown in Figure 1-11.

2. Click the Refresh button to retrieve the latest radio stations.

More Web radio stations are added all the time. The Refresh button in the top-right corner of the iTunes window (taking the place of the Browse button) connects iTunes to the Internet to retrieve the latest list of radio stations for each category.

3. Click the triangle next to a category name to open the list of radio streams in that category.

Radio station broadcasts stream to your computer over the Internet — sections of the audio transfer and play while more sections transfer so that you hear it as a continual stream. Some large radio stations offer more than one stream.

4. Select a stream and click the Play button.

Within seconds you hear live radio off the Web.

If you use a modem connection to the Internet, you may want to choose a stream with a bit rate of less than 56 Kbps for best results. The Bit Rate column shows the bit rate for each stream.

Figure 1-11:
Selecting a
Web radio
station.





iTunes creates a buffer for the audio stream so that you hear continuous playback with fewer Internet-related hiccups than most Web radio software. The buffer temporarily stores as much of the stream as possible, adding more of the stream to the end of the buffer as you play the audio in the buffer. If you hear stutters, gaps, or hiccups when playing a stream, set your buffer to a larger size by choosing iTunes⇧Preferences. In the Preferences window, click the Advanced button, and then choose a size from the pop-up menu for Streaming Buffer Size. Your choices are Small, Medium, or Large (sorry, no X-Large).

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Saving your favorite stations

Car radios offer preset stations activated by you pressing a button. Of course, you first need to tune into the station of your choice. You can do the same with iTunes, only the process is much easier:

- 1. Select a radio station stream.**
- 2. Create a playlist, or scroll the Source list to an existing playlist.**

See Chapter 2 of this book to discover how to create a playlist.

- 3. Drag the stream name over the playlist name.**

iTunes places the stream name in the playlist with a broadcast icon next to it. You can click the playlist name and rearrange the playlist as you want, dragging stream names as you would drag song names.

Drag as many streams as you like to as many playlists as you like. Radio streams in your playlists play only if you are connected to the Internet.



To quickly create a playlist from selected radio streams, first select the streams (by holding down Shift or the ⌘ key to make multiple selections), and then choose File⇧New Playlist from Selection.

Adding Web broadcasts

Millions of Web sites offer temporary streaming audio broadcasts all the time. A rock group on tour may offer a broadcast of a special concert, available for only one day. You may want to tune in weekly or monthly broadcasts such as high-tech talk shows, news programs, documentaries, or sporting events . . . the list is endless. You may even have access to private broadcasts such as corporate board meetings.



As of this writing, iTunes supports only MP3 broadcasts. You can find lots of MP3 broadcasts at www.shoutcast.com and live365.com.

28 *Listening to Web Radio*

All you need to know is the Web address, also known as the URL (Uniform Resource Locator) — the global address of documents and other resources on the Web. You can find most URLs from a Web site or e-mail about a broadcast. Then follow these steps:

1. Choose **Advanced** ⇨ **Open Stream**.

The Open Stream dialog box appears, with a URL text field for typing a Web address.

2. Type the exact, full URL of the stream, as shown in Figure 1-12.

Include the **http:** prefix as in `http://64.236.34.141:80/stream/1014`.

If you're connected to the Internet, iTunes automatically retrieves the broadcast and places it at the end of your song list.

Figure 1-12:
Enter the
URL to play
any Web
streaming
broadcast.

