

iPod Integration for Mac

A Guide to Using FireBall with iTunes and iPod for Mac Users

Table of Contents

FireBall to Mac Networking Basics	3
Overview	3
Requirements.....	3
Connecting to Your FireBall	4
Setting up the FireBall Server	4
Connecting to the FireBall Server	4
Integrating with iTunes and iPod	7
What You Can Do.....	7
What You Can't Do.....	7
Importing Music Into iTunes	7
Creating iTunes Playlists.....	10
Burn CDs from iTunes.....	10
Sync Playlists and Music to your iPod.....	11
ID3 Tags and the Mac	12
What is an ID3 Tag?	12
FireBall's ID3 tag Requirements	12
Importing Music Into FireBall	14
Connecting to the FireBall Server	14
Importing your Music Files	16
Importing iTunes Music Store Files.....	17
Importing Whole iTunes Music Store Albums.....	17
Importing Single iTunes Music Store Songs.....	19

FireBall to Mac Networking Basics

Overview

With the new Network File Sharing feature built into FireBall, you can now access your FireBall from your Mac using your home network. Having access to your FireBall allows you to do things like backup your music files, import music files from your Mac to your FireBall, remotely control your FireBall from your Mac, and share your FireBall based music with iTunes and the Apple iPod. This document will explain how to do all of these things using your Mac and your FireBall over your home network.

Requirements

In order to connect to your FireBall, you will need to have your FireBall and Mac on the same network. This document assumes that you already have a home network correctly setup and configured. If you need help setting up your network, please review the "Home Network Primer" available on the Escient web site, or contact your Escient dealer.

The following items are required for connecting your Mac to your FireBall:

- Properly configured Ethernet home network
- Fireball E2 Music Manager, DVDM-300, or FireBall E upgraded to E2 software
- Mac OS X computer with 64MB of ram and Mac OS X 10.3.5 or later
- iTunes 4.5 or later

Connecting to Your FireBall

FireBall uses a type of file server commonly called “Windows Networking” or “CIFS/SMB”. CIFS/SMB networking is found in most Microsoft operating systems and allows PCs to connect and then share files over a network. Mac OS X has a built-in Windows Networking client for CIFS/SMB and thus allows the Mac to connect to any CIFS/SMB server on the local network.

Setting up the FireBall Server

Before you can connect to your FireBall from your Mac, you must configure FireBall’s server settings. Follow these steps to configure your FireBall server:

1. Using your FireBall remote, press **SETUP** to display the Setup Menu.
2. Select the **NETWORK** menu item.
3. Select the **SERVER SETTINGS** menu item to display the Server Settings screen.
4. Enter a name for your FireBall using the remote or keyboard. Do not use spaces in the name.
5. Select the **SAVE** button to save your settings.
6. Press **SETUP** again to exit the Setup menus.



Server Settings screen

Connecting to the FireBall Server

Once you have setup the FireBall server, you can now connect to it from your Mac. Follow these steps to connect to your FireBall from your Mac OS X computer:

1. Go to the Finder and select **Connect to Server...** from the Go Menu.



2. Enter "smb://" (without the quotes) and the name of your FireBall server into the Server Address field in the Connect to Server dialog. Example: smb://MyFireBall



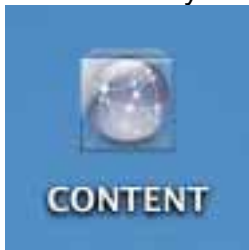
3. Select the **Connect** button and wait for the Mac to locate your FireBall on the Network. When your FireBall is located, the SMB Mount dialog will appear.



4. Select **OK** to select the default volume called "Content".
5. Depending on your network configuration, the SMB/CIFS Filesystem Authentication dialog might be displayed. If it is, just click the **OK** button. There are no usernames or passwords to enter for connecting to your FireBall server.



6. The Content volume, which contains all of your FireBall's music content, will be mounted on your Mac's Desktop.



The Content volume is mounted as a Read-Only volume in order to minimize the chances of accidentally deleting music from your FireBall.

Integrating with iTunes and iPod

FireBall supports iTunes and iPod integration through the FireBall Network File Sharing feature described above. Once your Mac is connected to your FireBall over the network, you can access FireBall's music and use it from iTunes and sync it with your iPod.

Please read the section ***Connecting to your FireBall*** before proceeding to make sure that you can mount FireBall's CONTENT volume on your Mac Desktop.

What You Can Do

Once FireBall's is mounted on your Mac Desktop, you can:

- Import FireBall MP3 music into iTunes
- Create iTunes Playlists
- Burn CDs using iTunes
- Sync Playlists and Music to your Apple iPod

What You Can't Do

Here are some things you **can't** do with iTunes:

- Copy Music from an iPod to FireBall
- Copy iTunes Playlists to your FireBall
- Import FLAC files

Importing Music Into iTunes



iTunes allows music files to reside on different volumes or hard drives, including network volumes. Since FireBall's CONTENT volume is really just another network volume to the Mac, you can add your FireBall music to iTunes.

iTunes creates and maintains it's own Library index files which are separate from the actual music files that appear in it's browser window. This means that the ***iTunes Music Library*** file can remain on your hard drive (usually located in your Music folder) while the actual music files are located on some other volume, like the FireBall CONTENT volume.

Note: Since iTunes does not currently support FLAC files, only MP3 files from FireBall can be used with iTunes.

Follow these steps to import your FireBall music content into iTunes:

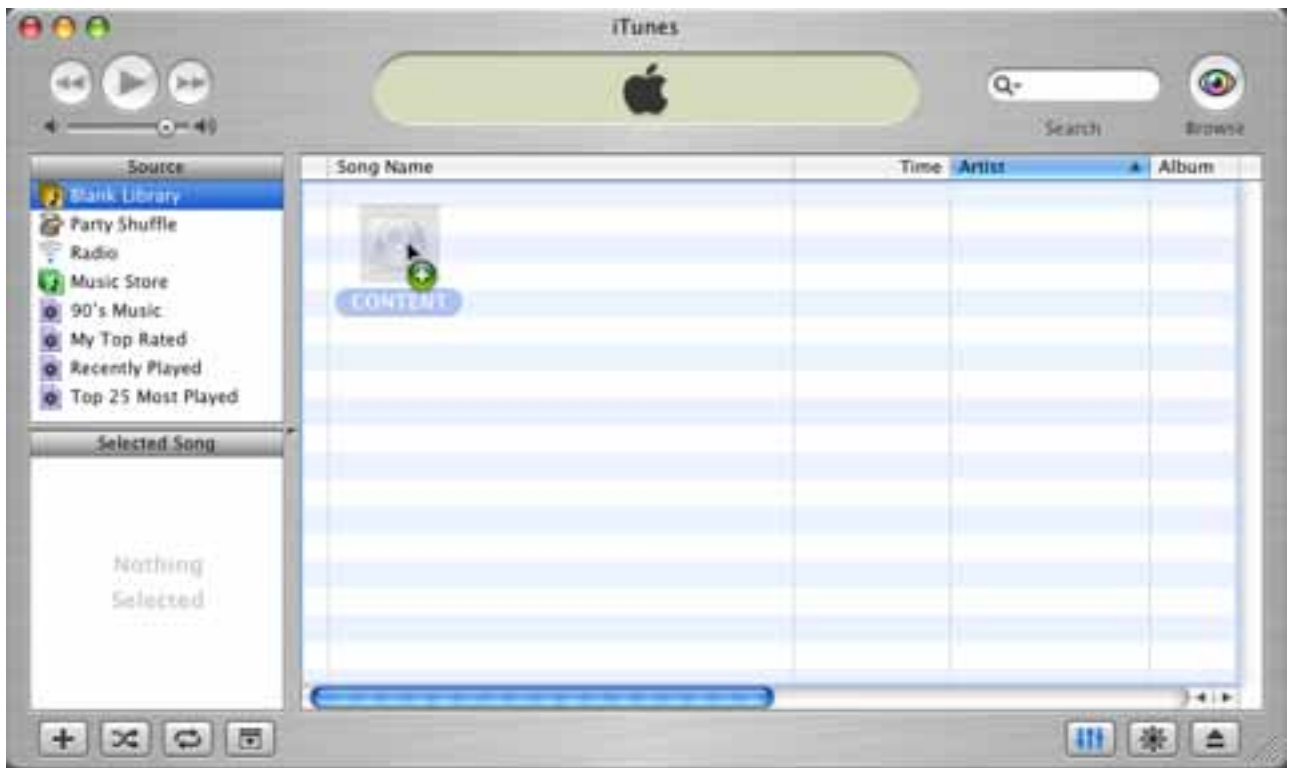
1. After mounting your FireBall's CONTENT volume (see above), open iTunes on your Mac.
2. Select **Preferences...** from the iTunes menu



3. Click the Advanced icon in the toolbar to display the **Advanced** Preferences panel.
4. Make sure that **Copy files to iTunes Music folder when adding to library** is **NOT checked**. If it is checked, all music files imported into iTunes will be copied into your hard drive as they are imported. We don't want to do this, because we simply want to access the music from FireBall, not duplicate it on the Mac.



5. Drag and drop the CONTENT volume from your Mac Desktop to the iTunes browser window.



6. Wait while iTunes scans the CONTENT volume for valid MP3 files and adds them to the iTunes Library.



7. When all your MP3 files have been imported, the iTunes browser window will display the music content from your FireBall, including cover art!



You can now access your FireBall music from iTunes just as if it were located on your Mac.

Creating iTunes Playlists



Now that your FireBall music has been added to the iTunes Library, you can create iTunes Playlists. Playlists can contain any combination of music available in the iTunes browser, no matter where it actually resides. The only thing to remember is that FireBall's CONTENT directory must be mounted on your Mac in order for iTunes to locate and play FireBall music.

Please refer to the iTunes Help screens for more detailed information about creating Playlists within iTunes.

Note: iTunes actually streams each MP3 from FireBall in real-time over your network. This may limit the number of simultaneous client streams that your FireBall server can play at once.

Burn CDs from iTunes



Again, since your FireBall music has been added to the iTunes Library, you can burn CDs directly from iTunes Playlists on your Mac. Playlists can contain any combination of music available in the iTunes browser, no matter where it actually resides. The only thing to

remember is that FireBall's CONTENT directory must be mounted on your Mac in order for iTunes to locate and burn CDs that contain music which is physically located on your FireBall music server.

In iTunes, you burn a CD from a Playlist. Create a Playlist in iTunes with the songs you want on your CD, then click the Burn icon in the upper right corner of the screen. Please refer to the iTunes Help screens for more detailed information about creating Playlists within iTunes.

Sync Playlists and Music to your iPod



Once again, since your FireBall music has been added to the iTunes Library, you can also sync iTunes Playlists to your iPod. Your iPod can contain any combination of music available in the iTunes browser, no matter where it actually resides. The only thing to remember is that FireBall's CONTENT directory must be mounted on your Mac in order for iTunes to locate and sync MP3 music which is physically located on your FireBall music server.

Please refer to the iTunes Help screens for more detailed information about syncing music to an iPod using iTunes.

Note: Remember that iTunes does not support FLAC files, so only FireBall MP3 files can be synced to an iPod.

ID3 Tags and the Mac

What is an ID3 Tag?

When MP3s became popular in late 1996, people started wondering if there would be a solution for the lack of information in audio tracks stored in MP3 format. Basically the problem was that even most advanced rippers who distributed audio tracks in MP3 format, included the information about album, track name, etc inside the filename. Since some people then renamed the files as something else that didn't provide the same quality of information anymore, ID3 was born.

An ID3 tag is a small piece of information stored physically inside the MP3 file (in the beginning or in the end of the file, depends on ID3's version). ID3 tags (as the pieces of information that ID3s contain are called) can contain various information about the MP3, like album name, song name, artist, original artist, genre, composer, releasing year, additional comment fields, cover art etc.. Nowadays ID3s are de facto in audio world and they can be added to most of the audio formats and even to certain video formats in order to provide additional information of the file. FireBall uses ID3 tags to store information about MP3 and FLAC files which are recorded or ripped into FireBall.

FireBall's ID3 tag Requirements

FireBall supports version 1.0, 1.1, 2.2, and 2.3 ID3 tags. Before you can properly import music files into FireBall, you should first convert all of your MP3 and FLAC files to use ID3 version 2.2 or 2.3 tags. There are several programs available to do this including iTunes, however since iTunes does not support FLAC files you cannot use it for editing ID3 tags embedded into FLAC files.

Media Rage is a Mac OSX program that can edit ID3 tags embedded into MP3 and FLAC files. Escent recommends that you use this software for editing ID3 tags in your FLAC files. Please visit the Chaotic Software web site to download a trial copy of this great software.

<http://www.chaoticsoftware.com/ProductPages/MediaRage.html>



Media Rage ID3 Editor

Note: Because the CONTENT volume is a read-only volume, you cannot edit anything. You must first copy any files you want to edit onto your Mac and then import them back into your FireBall, replacing the originals. Please see the section **Importing Music Into FireBall** for instructions on how to get your music files into your FireBall using the IMPORT volume.

Importing Music Into FireBall

FireBall's CONTENT volume is read-only, which means you can't write to it or use it for importing music files from your Mac to your FireBall. There is a way! FireBall actually provides two server volumes, one for reading your music collection and one for importing your music collection. The difference is that the IMPORT volume is a writeable volume while the CONTENT volume is read only.

Connecting to the FireBall Server

Follow these steps to connect to your FireBall from your Mac OS X computer:

1. Go to the Finder and select **Connect to Server...** from the Go Menu.



2. Enter "smb://" (without the quotes) and the name of your FireBall server into the Server Address field in the Connect to Server dialog. Example: smb://MyFireBall



3. Select the **Connect** button and wait for the Mac to locate your FireBall on the Network. When your FireBall is located, the SMB Mount dialog will appear.



4. Select **IMPORT** from the share popup menu and click OK.
5. Depending on your network configuration, the SMB/CIFS Filesystem Authentication dialog might be displayed. If it is, just click the **OK** button. There are no usernames or passwords to enter for connecting to your FireBall server.



6. The IMPORT volume will be mounted on your Mac's Desktop.

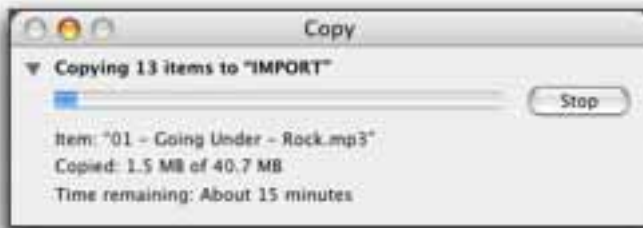


Importing your Music Files

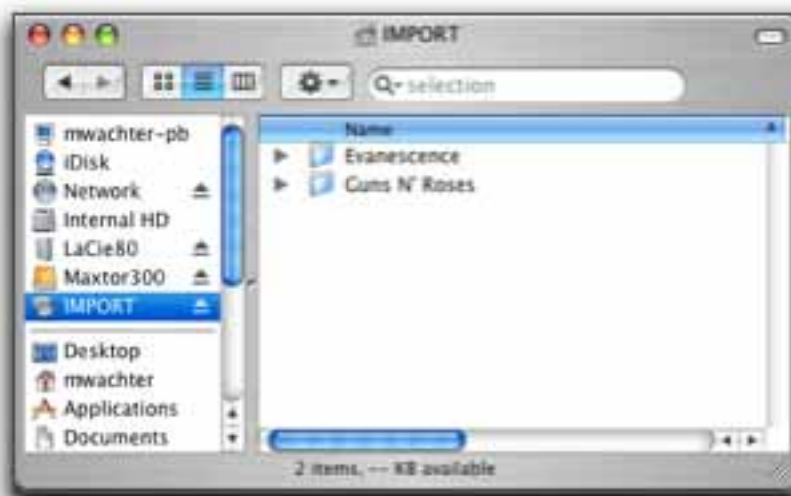
Once the IMPORT volume is mounted on your Mac's desktop, simply drag and drop any MP3 or FLAC audio file into the IMPORT volume and the files will be copied to FireBall and added to the FireBall Music Library. You can drag and drop whole collections, a folder of songs, or just a single song.



When the music files are copied to the FireBall, you will see the new songs appear on your FireBall's Music Guide, under the "artist – album name" as defined in the file's ID3 tag.



Note: The IMPORT directory may contain special "cache files" in it if you have previously imported music into your FireBall. These files are just temporary cache files that appear to be the original music files, however they are not. They are just temporary "stub" files that indicate what you previously imported into your FireBall. You can delete these files without actually deleting the originals which physically reside on the CONTENT volume.



The IMPORT volume displaying the temporary cache files for an imported artist folder

Importing iTunes Music Store Files

Music files that you purchase from the iTunes Music Store are AAC (Advanced Audio Coding) files protected with DRM or Digital Rights Management software. This means that you can not freely copy these songs from one place to another like you can copy songs that you rip yourself. FireBall can not play AAC files (.m4a files) nor protected AAC files (.m4p files) like those purchased from the iTunes Music Store, however there is a way to convert these files for import into your FireBall.

Importing Whole iTunes Music Store Albums

Apple allows you to make 7 legal CD burns or copies of any album downloaded from the iTunes Music Store.

Follow these instructions for importing protected AAC or iTunes Music Store albums into your FireBall.

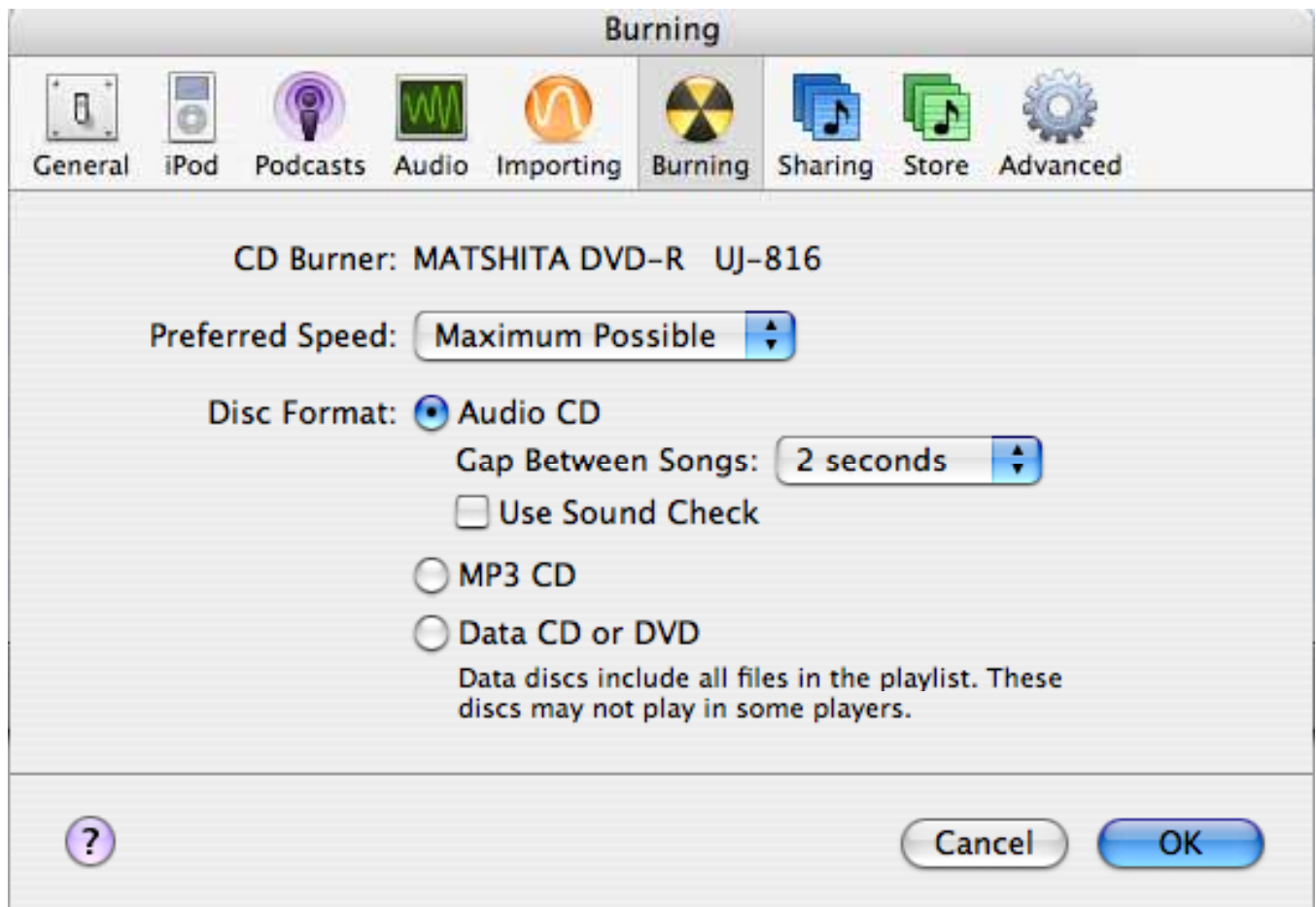
1. Purchase an Album from the iTunes Music Store.



2. Create a New Playlist in iTunes and add the purchased songs to the Playlist in the correct order.



3. Select Preferences... from the iTunes Menu and select the Burning preferences panel.



- Specify the Disc Format as **Audio CD** with 2 second gaps and select the OK button.
- Select the Playlist name in the Source panel and press the Burn Disc button.



- Remove the new CD from your Mac and insert it into your FireBall.
- You can now use the new CD just as if you purchased it from a store. Look it up using the Gracenote CDDB and rip it into your FireBall.

Importing Single iTunes Music Store Songs

Individual songs purchased from the iTunes Music Store can be imported using the same method described above, however no cover art or metadata about the track will be imported. This is due to the fact that metadata is not burned onto an Audio CD, there are no ID3 tags per-se. Because the Audio CD is a compilation of songs, FireBall and the Gracenote CDDB have no idea what the original artist-album-song data really is. After importing individual songs, you will have to manually edit the data for each song.