Song Kong

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Intro

Introduction

SongKong is a music organization and tagger application designed to simplify the task of managing your digital music collection. SongKong is an easy-to-use application that can be used to match your songs from online databases and updates your songs with the correct information from these databases, including artwork. SongKong can even match songs that have no metadata using audio fingerprinting. SongKong can reorganize and rename your songs based on this information, additionally if you use iTunes this is updated as well.

If you are like most collectors of digital music, your collection has likely grown over time, gathered from a variety of different sources. There are likely some discrepancies among your music collection, whether it is missing artist information or album art, multiple copies of the same song, or inconsistently or unnamed audio files. SongKong has been designed to resolve all of these issues. Music metadata is the information embedded in your audio files and used by a wide variety of devices (mobile phones, mp3 players, etc.) and apps to identify your music. This includes information such as song title, band or artist name, the album the song comes from, album track number, the type of music (also known as genre), the year the song was released and much, much more. SongKong adds this information to your music collection.

The concept behind SongKong is that your songs can be identified automatically, and if this is done carefully you get a complete and consistent music library. However we realize that 100% music identification is not quite a reality for most of us so SongKong also provides manual metadata editing as well.

SongKong Lite

 Status report gives details of your metadata coverage and creates a spreadsheet of your current metadata.

- Manual editing of your metadata via the desktop or via the remote browser based Remote user interface
- Fix songs and Delete Duplicates tasks can be run in preview mode only

SongKong:

- Matches your music to online music databases MusicBrainz and Discogs with the dedicated Albunack server
- · Special processing for Classical releases
- Adds artwork from the Cover Art Archive
- · Reorganize your music using a naming convention you choose
- Delete duplicate copies of files
- Creates a detailed report show exactly what has been changed
- Stores all changes in a database so you can reverse them at a later date.
- Can inform **iTunes** of all modifications
- · Can also tasks from the command line
- Can also run administrative tasks via the remote browser based **remote** user interface

SongKong Pro has some additional features adds metadata derived from acoustic analysis including

- Adds metadata derived from acoustic analysis including BPM (Beats per Minute), Key Scale and Mood
- All tasks can be run remotely via the browser based Remote user interface
- · Allows matching from the Albunack Server at double the rate of SongKong
- Adds [HD] automatically for High Definition (24-bit) albums

SongKong for Melco was designed in conjunction with **Melco** for the benefit of Hi-end audio customers such as *Melco N1* customers with some additional features.

- It can read the proprietary metadata format used by Naim UnitiServe when CDs are ripped to Wav
 format and embed the metadata into the files themselves so that the metadata be viewed outside
 of the Naim ecosphere
- This includes additional user edits made by the Naim user with the Naim app
- Designed to work seamlessly with the Twonky and MinimServer UPnP servers that are available for Melco N1

Basic Operations

SongKong has three main tasks, Status Report, Fix Songs and Delete Duplicates

The **Status Report** is a very useful tool for taking a snapshot of your music collection, it is recommended you run this task before anything else. It has two main features, it creates a metadata completeness report and a spreadsheet of your songs existing metadata.

To automatically identify and add metadata to your songs with SongKong you simply have to select the music folder you would like to have reorganized and tagged and then select **Fix Songs**, review the

options and select **Start**. SongKong then matches the selected songs to the Albunack Server - matching your songs and adding artwork. There is no limit to the number of songs you can update at one time.

You can also easily find duplicate songs in your collection with the **Delete Duplicate Songs** option.

After task has completed a detailed report is generated containing details of everything that has been changed.

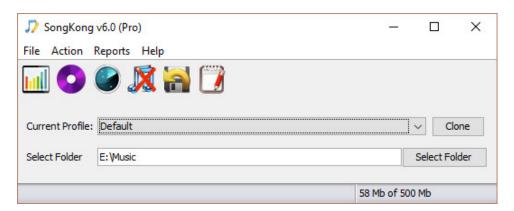
If **Fix Songs** modifies or renames your files and you don't like the results, you can selectively undo changes at folder level at any time. All changes are stored in SongKong internal database so simply start SongKong and select the folder (or sub folder) you modified and select **Undo Fixes**.

Additionally you can configure a **Watch Folder** and then SongKong will detect when folders are added to the watch folder and fix them automatically.

For those songs not identified you can also apply manual edits even via your browser with Edit Songs.

Desktop Mode

SongKong is usually used as desktop application for your Mac, Windows or Linux computer, this is the default when you start SongKong. Most screenshots from this help manual will show screenshots from the desktop version, there are slight variations between Mac, Windows and Linux screens but they provide the same functionality. The only exception is that Linux cannot automatically update iTunes since iTunes is not available for Linux.



You can select multiple folders using the **Open Folder** menu item, once a folder is selected it is displayed in the **Selected Folder** field and then you can use select the **Fix Songs**, **Start Monitoring Watch Folder**, **Undo Fixes** or **Delete Duplicate Songs** task to process this folder.

But unless you want to run **Start Monitoring Watch Folder** you can select multiple folders, there is no need to limit to one folder, and you can drag folders directly onto SongKong instead of using Open Folder.

SongKong also works with individual music files and .M3U and .M3u8 playlists, just drag and drop them onto SongKong. For example music files can be dragged directly from iTunes, Finder on OSX and Windows Explorer on Windows.

SongKong will run the task using the options configured in the selected *Profile*. The *Default* profile works well for most customers but we provide a range of profiles that have been configured for other common scenarios. You can also create a new profile based on the currently selected profile using the **Clone** button, this becomes the current profile and any changes you make to the options in the subsequent task wil be applied to this profile.

Once you have selected a task a progress window shows how SongKong is progressing, at the end of progressing a report is created an opened in your default web browser. The only exception is the **Start Monitoring Watch Folder** task, this will not finish until you stop it.

Cmdline Mode

You can also run SongKong as a command line tool, this means it can be included as part of an automated scripted solution, great for linux servers.

```
C:\Program Files\]think\SongKong>debuglogfile is:C:\Users\Paul\AppData\Roaming\SongKong\Logs/songkong_debug%u-%g.log

userlogfile is:C:\Users\Paul\AppData\Roaming\SongKong\Logs/songkong_user%u-%g.log

Unrecognised Options for SongKong
Options for SongKong are as follows:

Usage: main class> [options] file1 file2 file3 ...

Options:

-d

delete duplicates in specified files
Default: false

-m

show usage information
Default: false

-m

fix songs in specified files
Default: false

-r

r un in remote mode, access via browser (i.e http://localhost:4567)
Default: false

-u

undo any changes made to songs in specified files by SongKong
Default: false

-w

Watch folder in specified folder
Default: false
```

Remote Mode

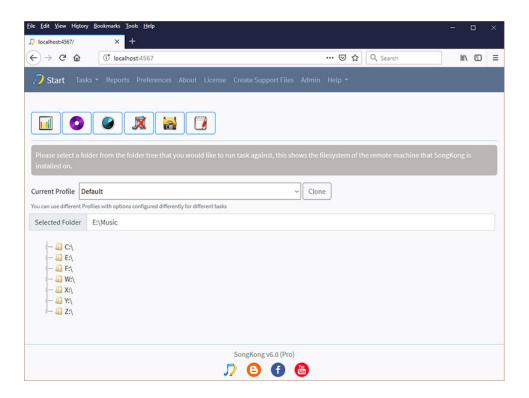
In **Remote Mode** you can control SongKong from a remote device using a regular webbrowser, and this could be another computer, iPad or mobile phone.

This means having installed SongKong on your computer you can then use it from another location in your home, for example your computer may in your home office but you can control from your phone in your lounge. But it also means you can install and use SongKong on a computer that does not have a **Graphical User Interface** such as a Linux server, and unlike the command line tool you have full access to all user options and administrative tasks such as license installation. The **Remote Mode** means you can install SongKong on the same machine as your music resides on so that the actual file updating does not have to be done over the network meaning much faster matching, especially with large lossless files.

The *Remote Mode* user interface has been designed to look as much like the desktop mode as possible, whilst being adaptable to the different screen sizes of computers and mobile devices.

Remote Mode can be invoked either by starting SongKong from the command line with the **-r** option or by starting in regular desktop mode and selecting **Start Remote Mode** from the **File** menu.

The **Fix Songs** and **Delete Duplicates** tasks require a **Pro**, **Commercial** or **Melco** license to run from Remote Mode.



Terminology

SongKong's primary source of data is **MusicBrainz**. If you are familiar with MusicBrainz you will know it has very clearly defined terminology, but some of this terminology is not well understood outside of the MusicBrainz community. So I have used simpler terminology in this guide and SongKong itself whenever possible.

Within MusicBrainz when an artist records a new album or single this is known as a **Release Group**, typically this is then released in different formats and different countries on different dates. Each version of this is known as a **Release**. Every song on a release is a **Recording**, and the same recording may be found on multiple releases, including releases from different release groups.

Within SongKong we use the term **Album** for any type of release, and indeed release group. Where we need to differentiate between a release and a release group we use the term **Album** (**Specific version**) and **Album** (**Any version**). We use **Song** instead of recording, and when we want to refer to a recording without a release we use **Song Only**

Status Report

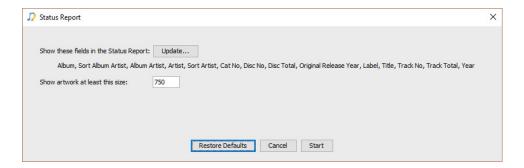
The **Status Report** task is a very useful tool for taking a snapshot of your music collection, it is recommended you run this task before anything else. It has two main features, it creates a metadata completeness report and a spreadsheet of your songs existing metadata.

Status Report Options

The **Status Report** checks every song to see if it currently has metadata for the fields listed in **Show these fields in the Status Report**, by default a small subset of the fields supported by SongKong are listed.

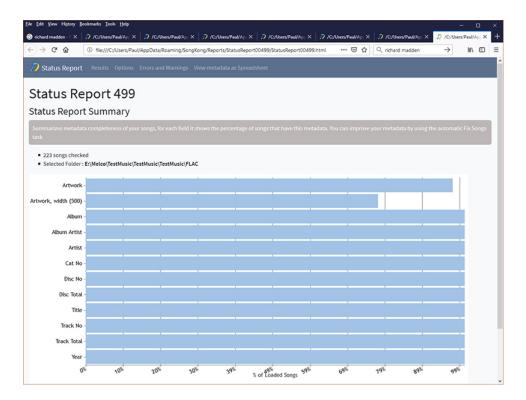
Songs are always checked to see if they have embedded artwork, and you can use the **Show artwork** at least this size option to show artwork larger than a particular size, this allows you to determine how many songs have high resolution artwork based on your own idea of high resolution artwork.

Once you initiate **Start** SongKong will begin counting your metadata completeness, creating a UPnP Control Point style browser to browse your metadata by artist/album/composer/work and folder and creating a metadata spreadsheet containing all your metadata.



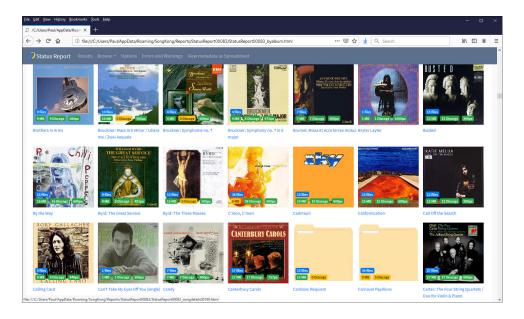
Completeness Report

The Song Metadata Completeness Summary section of the report creates a bar chart showing the percentage of songs with each metadata, this is very useful for finding holes in your metadata. Complete and Consistent metadata is necessary for the best enjoyment of your music and optimum browsing experience and SongKong can help you with this by automatically identifying songs and albums and adding in-depth metadata.

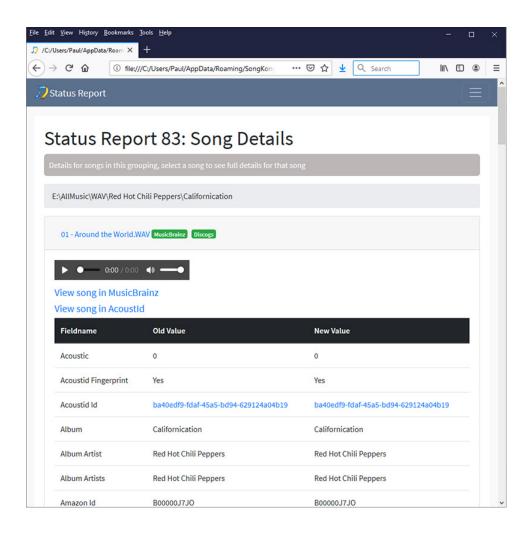


Browse

Browse your metadata by Artist/Album, Album, Composer/Work or Folder,

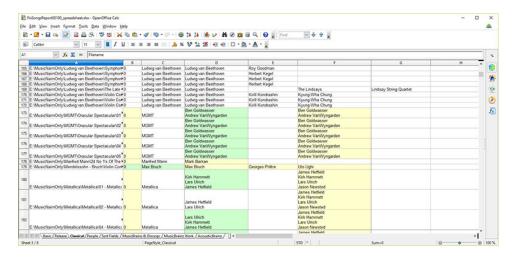


You can drill down to the Album, Work or Folder you are interested and see the current metadata of the songs in this grouping



Metadata Spreadsheet

A spreadsheet is also created containing all of your metadata, this is accessed by selecting *View metadata as Spreadsheet* and is created using the standard **xlsx** format supported by all major spreadsheet applications.



Fix Songs

SongKong uses a small memory footprint however many files you load it with, and there is no limit on how many songs you can fix, it starts fixing songs immediately - it doesn't need to wait for all songs to be loaded.

SongKong integrates closely with **MusicBrainz** and **Discogs**. SongKong uses the **Albunack Server**, a dedicated server that is regularly updated with the complete MusicBrainz and Discogs databases, but because it is optimized for SongKong matches are far quicker and more accurate. **SongKong** is a companion product to the award winning **Jaikoz** and uses similar matching methods to ensure the best possible match.

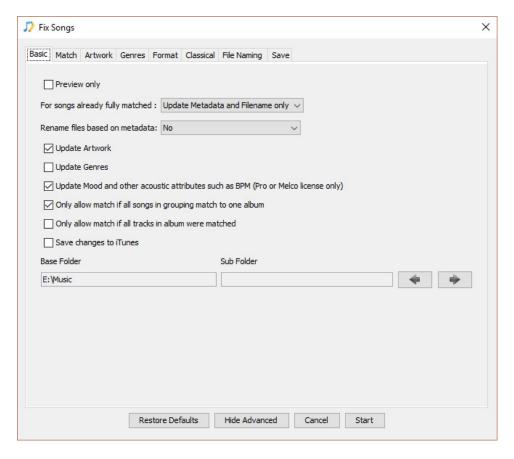
- Firstly songs are grouped, usually by folder as usually a folder represents a single album, but SongKong can also identify multi-disc albums that may be stored as one folder per disc, when a folder represents songs from a single artist over many albums, or a random set of songs in these cases SongKong groups by metadata as well by folder.
- If folder appears to represents a single album we create an *AlbunackDiscId* based on track order and track length. This is similar to a *freedb* lookup but is more accurate, does not require the original CD and is looking up a MusicBrainz release not a freedb release. We then do a lookup based on this id and try to get a good match, if we suceed we then use the linked Discogs release or search for a Discogs release.
- If no match could be found we create **Acoustid** Fingerprints for each song in the group, this allows songs to be matched based on the actual music not just the metadata. SongKong attempts to match each grouping of songs to albums rather than just match individual songs like some tagger software
- We then compare the group of songs to the MusicBrainz albums using both the Acoustid and the songs metadata and try to find a release (such as an album) that they can all be matched to. If we get a good match we then update the songs metadata such as artist name, song title and catalogue no, in fact SongKong can update over **one hundred** different fields. If we get a match to a MusicBrainz album it may contain a link to a release on the Discogs from where we can get more metadata.
- If we cannot actually match the group of songs to an album but we can match individual songs to MusicBrainz recordings using Acoustids we then update the song details without updating any release specific information.

- If we are unable to match to an individual MusicBrainz recording but Acoustid does contain user submitted metadata and we currently have no metadata for the song then we use this to add basic artist, title, album details.
- If we have not yet matched the songs to Discogs, we then search for a matching Discogs album for the grouping.
- If a match has been found we save the songs, renaming from metadata if the option is enabled. If we still don't find a match it is probable the song doesn't exist in either database and we leave the songs untouched
- If at this stage we've yet to find a match we can also try and match individual songs to MusicBrainz and guess the best release from the limited information available, but this stage is not done by default.
- We then save any changes made, renaming files form their new metadata if the option has been selected by user.
- Finally we generate a report showing exactly what has been matched, and what metadata has been modified for any of the modified songs
- This is essentially how matching works in SongKong however there are various options you use to modify this.

The majority of customers should not need to change many options, but there are a number of options to fine-tune the way SongKong works. By default some options are hidden but they can be displayed va the **Show Advanced** button. The **Restore Defaults** returns options for this profile to the factory settings, equivalent to the initial **Default** profile configuration, but no changes are actually made if you select **Cancel** rather than **Start**.

Fix Songs Basic Options

Basic Options, these are the options that you are most likely want to change.



Preview Only

No files are actually modified when this option is enabled. This allows you to test SongKong without making modifications, preview is always enabled in SongKong with a Trial License.

For songs already matched

With the default **Update Metadata and Filename Only** option SongKong will only try to match songs that have not already been matched to MusicBrainz previously, but it will update existing matches with the latest data or make adjustments based on customer preferences. For example if **Update Artwork** was disabled when originally matched and it is now enabled SongKong will check for artwork without modifying the releases that the songs have already been matched to. Or if you have changed your file rename mask then the new mask will be applied to these already matched songs in additionally to newly matched songs.

If the option is **Rematch** then SongKong disregards any matching previously done by SongKong or any other MusicBrainz enabled tagger such as Jaikoz and rematches from scratch.

If the option is **Ignore** then SongKong ignores any songs already matched to MusicBrainz albums and does not process them any further. Note that songs matched to a MusicBrainz song only or a Discogs album are **not** ignored.

Rename files based on metadata

By default this option this set to **No**. It can be very useful to name files based on the current metadata but this can cause problems for any other applications that index files by their file name. For example if you are using a music manager application and rename a file that is under the music managers control then it will not be able to find it, it is usually better to use SongKong on songs before adding them to a music manager. But if you are using iTunes then SongKong can inform of iTunes of changes that SongKong makes so that iTunes does not lose the file.

This option is not simply **Yes** or **No**, you can decide to rename songs based on how and/if they have been matched. Often the best choice is **Yes if matched to a release** this ensures that songs are only renamed if matched to a MusicBrainz or Discogs release, this in turn ensures that complete albums of songs are renamed and therefore kept together.

Alternatively the **Yes if matched to a release or song** option can be used, this additionally allows songs that have been matched to a MusicBrainz song but not a release. This ensures that all the songs renamed will have reliable basic metadata, but if you have a folder of songs representing an album and they have only been matched to a song it could cause them to be put into different folders.

The **Yes if has metadata** option allows any song to be renamed even if not matched by SongKong as long as it contains the basic metadata of **Title**, **Album** and either **Artist** or **Album Artist**. This option allows SongKong to be used for any collection of songs even when the songs could not be found in the MusicBrainz or Discogs databases.

The **Yes, for all files** option takes this a step further allowing any song to be renamed regardless of the status of it's existing metadata.

Update Artwork

SongKong can find artwork from a number of sources and there are additional options available in the Artwork tab that let you refine how artwork is matched. But artwork quality can be a subjective notion, SongKong only replaces existing artwork with higher resolution artwork, but higher resolution is not always higher quality. Or you may already have artwork provided in a non-standard location such as iTunes artwork stored in your iTunes database and do not require it to be stored directly in your songs. For these reasons you might prefer SongKong to leave your artwork as it is, if so disable this option.

Update Genres

SongKong uses Genres from Discogs. If enabled Discogs adds the first genre for any album matched to Discogs to each song in the album, but only if the song does not already have a genre. But genres is a subjective notion, for these reasons you might prefer SongKong to leave your genres alone, if so disable this option.

Update Mood and other acoustic attributes such as BPM (Proonly)

SongKong uses data derived from acoustic analysis of the actual song from AcousticBrainz. Enabling this option enables the options set on the **Mood** tab, this option is only available if you have a **SongKong Pro** license.

SongKong **Pro** can use acoustic analysis to determine additional features of your songs. With other solutions the software has to listen to each song to calculate the acoustic analysis, this is time consuming and CPU intensive. But SongKong Pro does not have to do this, the songs for nearly three million songs have already been analysed and results of the acoustic analysis is already stored with the song in the Albunack Music Server, so there is no additional time required to add fields calculated via acoustic analysis.

Only allow match if all songs in grouping match to one album

This option is enabled by default to protect your songs from being split into multiple folders due to sub-optimal matching. If your songs are already organized one folder per album then songs in the folder will only be matched to a release if all songs in that folder can be matched to the same release. Usually SongKong is clever enough to recognise when you have a multi disc release and have created separate folders per disc as well, in this case it will only allow a match if songs in each sub-folder are matched to a disc of the same release.

Usually this option should be enabled because if even if you some have folders containing a random assortment of files SongKong can still use Acoustid matching to identify these songs adding the correct

artist and song title, but without matching the album metadata and without renaming these files. These songs are listed in the **Match to MusicBrainz song only** section of the report. This is useful because it allows identification of those songs that are completely unidentified and matching the basic song information may be enough to allow the songs to be identified to a Discogs album in the next stage.

If you disable this option then if SongKong fails to match the folder to a MusicBrainz album it will then try and group the songs in the folder into smaller groupings based on their existing metadata, if this fails and matching to Discogs fails as well it then does individual song by song matching and will match each song to the best album it can find with the limited information available.

Only allow match if all tracks in album were matched

If enabled together with **Only allow match if all songs in grouping match to one album** then all the songs in the folder must match to same album and all songs on the album must be matched, so if there are 10 songs in folder it can only match a 10 song album. If your music collection is already well organized and you have complete albums this ensures that only very high quality matches will be made to MusicBrainz and Discogs but it does also mean if you have any partial albums they will not be matched to a MusicBrainz or Discogs album, although Match to MusicBrainz song only is still enabled to help identify songs.

If you have only this option enabled it means that any album that is matched must be completely matched but this doesn't have to be on a folder by folder basis, so for example if you have a folder containing 10 songs that failed to match any album but existing metadata in the songs creates two groupings of 5 each, then one of those grouping could be matched to a 5 track release that would be okay.

If this option is enabled individual song by song matching to the best album does not take place.

Base Folder / Sub Folder

When you select folders or files to fix SongKong tries to guess what part of the folder path contains metadata such as artist name or album name and which part does not contain metadata. It then splits the folder path into **Base Folder** and **Sub Folder**, the reason for this split is that if your songs are renamed from metadata only the sub folder part is renamed from your metadata.

But its not always easy for SongKong to get this right so you can use the arrow keys to modify where the split is. Or perhaps you would like the whole path to be modified by the rename mask, in this case use the right arrow to put the folder path in the sub folder field.

For example if your file name was /Music/The Beatles/Revolver then base folder should be set to / Music and sub folder set to /The Beatles/Revolver.

Save changes to iTunes

If you use iTunes as your primary media player, or just use it for copying songs to your iPod you'll probably want SongKong to update your iTunes library with any changes you have made. Enabling this option informs iTunes of the following changes

- When the metadata of songs already in iTunes are modified by SongKong.
- When songs already in iTunes are renamed or moved by SongKong.
- When SongKong matches a file not in iTunes, the file is automatically added to iTunes.
- When duplicates are deleted by SongKong, the deleted files are removed from iTunes.

So you can see the changes made by SongKong a date stamped playlist is created within a SongKong playlist folder listing all the added or modified songs

Warning Before enabling this option It is worth reviewing the following two preferences within iTunes Advanced options

iTunes Preferences

- Copy files to iTunes Media folder when adding to library (OSX, enabled by default, Windows, disabled)
- Keep iTunes Media folder organized (OSX and Windows, enabled by default)

Copy files to iTunes Media folder when adding to library will make a copy of every file and add it to iTunes media folder.

With this option enabled if you use Songkong on a folder outside of iTunes media folder then iTunes will copy this file to its media folder. Any subsequent modifications to the original file within SongKong will have no effect on the file used by iTunes because iTunes will now be using the copied file in the media folder. If you then you rename or move the original file then iTunes will see it as a different file add it again!

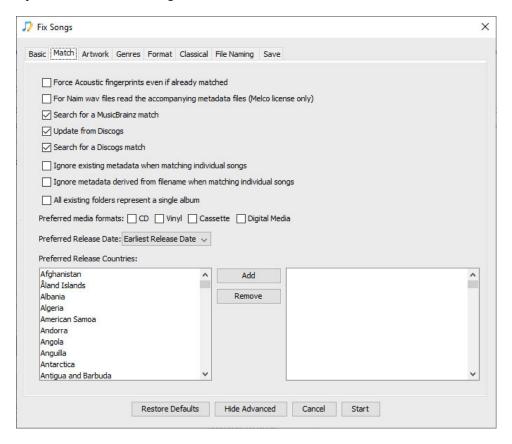
Keep iTunes Media folder organized renames files based on their metadata once they are added to iTunes.

If iTunes is your primary music player it is recommended that you have this option enabled and **do not rename files using SongKong**. This prevents the possibility of SongKong renaming or moving a file and then iTunes being unable to find the moved file, leading to duplicate records being created in iTunes due to a communication breakdown between SongKong and iTunes. But please note that iTunes will move and rename the files according the latest metadata, this means that the songs may no longer be where SongKong expects them to be so that trying to use **Undo Fixes** and selecting the last location will fail, you will have to select the original location.

Please understand ensure you understand these options and configure accordingly before processing songs with SongKong.

Fix Songs Match Options

Options that decide how songs are matched.



Force Acoustic Fingerprints even if already matched

SongKong may create acoustic fingerprints to help identify songs but if your music collection is already well organized it doesn't necessarily need to for all songs, this is good news because Acoustic fingerprints can take time to create on slow systems. If you enable this option it will force SongKong to create fingerprints even when they are not required for song identification, Acoustic fingerprints only even have to be created once for any particular file as long as you are not running in preview mode. ONe reason yo may wish to enable this option would be if you use audio fingerprints as a way to detect duplicates files with the *Delete Duplicates* task.

For Naim wavs read the accompanying metadata files (Melco Only)

The **Naim UnitiServe** is a powerful hi-end CD ripper and library store. When you use it to rip a CD the UnitiServe defaults to ripping to Wav format, it then looks up metadata from the All Music Guide and if no match can be found it would then use Cddb instead. But this metadata is stored in a file called **amginfo.xml** or **cddb.txt** within the same folder as the Wav rips for the album rather than stored within the Wav files themselves, and if you edit your music using the **Naim App** then these edits are stored in a **UserEdits.xml** file. This is fine as long as you only played your music via Naim but if you copy the files anywhere else no metadata would show up for the Wav files, this occurs even if the amginfo.xml, cddb.txt and UserEdits.xml files are copied as well since only Naim could parse these metadata files.

For a long time Naim users have had to make a decision between using Uncompressed Wav without metadata or converting to Compressed Flac. This allowed metadata to be stored but at the possible expense of sound quality since the Flac files are compressed.

When the above option is enabled if you have any folders that contain Naim Wav rips plus the Amginfo.xml or cddb.txt file then the metadata is now automatically embedded into the Wav files themselves, this can now be read and used by most applications and players. Because the files are local and no searching on the Internet is required this process is extremely fast, songs can be processed at a rate of about 1,000 songs a minute.

Wav did not used to have good metadata support but Wav now supports metadata using the ID3 [http://id3.org] format, the same flexible format supported by Mp3 and Aiff. This format is well understood and is more powerful then the metadata format used by Flac, so now you can have the **ultimate audio format and the ultimate metadata format**. We also write the basic metadata to the Wav Info chunk as well for applications that support Wav Info but not Wav ID3. For example some applications only supports Wav ID3 and some only supports Wav Info.

All the information from the metadata files is parsed, not just the basics like the **artist**, **album** and **track title** but other roles such as **producers** and **engineers**. For classical music the **conductor**, **composer** and **performers** are also added. Artwork is also embedded into the Wav file itself.

Of course you can also augment this metadata by using SongKong's standard functionality to lookup metadata such as 1000px artwork from **MusicBrainz** and **Discogs** as well.

Search for a MusicBrainz match

SongKong's main source for song matching is MusicBrainz so during normal operation you would never want to disable this option. However there are some special situations where by you may wish to disable it.

e.g.

• You want to match your songs only against Discogs and not MusicBrainz

Update from Discogs

When a match is made to a MusicBrainz album the MusicBrainz album may itself contain a link to the equivalent release on Discogs. If this option is enabled we make use of the additional information the Discogs album may have that the MusicBrainz album does not and add it to your songs metadata.

Search for a Discogs match

SongKong can also try and match songs to a Discogs album even if no match to a MusicBrainz album was found if this option is enabled.

Ignore existing metadata when matching individual songs

When matching individual songs instead of complete releases SongKong uses existing metadata and acoustids to try and identify songs. Sometimes a single acoustid can match multiple songs so this additional metadata helps SongKong pick the correct song. However, if you know the metadata is incorrect you can enable this option so that only acoustids are considered then SongKong will use the song that has been matched to that acoustid by the most people, this is usually the correct choice.

Ignore metadata derived from filename when matching individual songs

When matching individual songs instead of complete releases SongKong uses both metadata derived from the filename and the acoustid to try and identify songs. Sometimes a single acoustid can match multiple songs so this additional metadata helps SongKong pick the correct song. If the song has no song title SongKong tries to derive the song title from the filename but if you know the filename does not represent the song title it can be ignored by enabling this option.

All existing folders represent a single album

SongKong usually groups songs by folder and assumes that one folder represents one album or single, although it does clever things to identify multi-disc releases that may store songs in one folder per disc. Then if the **Only allow match if all songs in grouping match to one album** is enabled SongKong will not allow a match unless all songs in the folder have been matched to one album. But many of us may have some folders just containing a collection of essentially random songs and if SongKong identifies such a folder and was not able to match all the songs to one album it will then allow individual song matching for songs in such a folder. Some of you may store all your songs in a single folder, or one folder per artist and SongKong can also detect all these situations.

But if you know that **every** folder already represents an album you can enable this option to prevent SongKong from detecting non-album folders. Doing so ensures that SongKong cannot possibly break up songs in any folders because all songs in folder need to match to the same release.

Preferred media formats

SongKong often finds multiple potential releases that could match a group of songs, if the release is one of your selected media formats then that potential release has their score boosted making it more likely that it is the release that SongKong selects.

Preferred Release Date

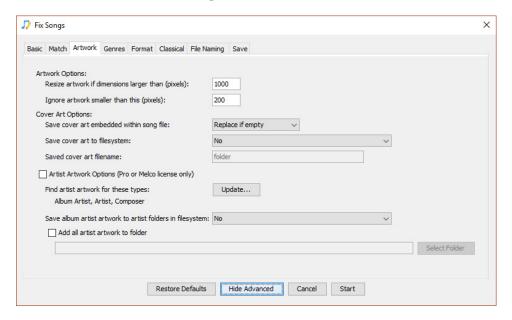
SongKong can take the release date of the potential releases into consideration, and boost the score of the earliest or more recent release, or ignore release dates entirely

Preferred Release Countries

SongKong often finds multiple potential releases that could match a group of songs, if the release was released in one of your preferred countries then that potential release has their score boosted making it more likely that it is the release that SongKong selects.

Fix Songs Artwork Options

Options that decide how SongKong handles matching artwork, all these options are ignored if **Update Artwork** is disabled on the **Basic Options** tab.



Artwork Options

These apply to both cover art and the artist artwork.

Resize artwork if dimensions larger than (pixels)

High quality artwork can take up a lot of disk space, it is often not necessary to have such high quality artwork embedded into your songs. In fact some song playing apps do not work with artwork that is larger than a particular size.

Ignore artwork smaller than this (pixels)

Sometimes artwork is found of such a low quality and small size that you would rather ignore this artwork.

Cover Art Options

Save cover art embedded within song file

Usually you want to save the artwork within the file itself for maximum portability, you can also decide if you overwrite any existing artwork or only existing artwork that is lower resolution. For special circumstances the **Never Replace** option never embed artwork, but we do not usually recommend this option.

- · Always replace value
- Replace if better quality
- · Replace if empty
- Never Replace

Save cover art to file system

Usually there is no need to save the artwork to the file system as by default it is stored in the music files themselves but if you need to save artwork to the file system you can enable this option and

decide if existing artwork can be overwritten or not, this can be useful for UPNP servers that may not understand embedded artwork for some formats (such as WAV), or to use artwork as the folder icon if using a UPnP contorl point to browse music by folder.

Save Artwork to File system looks at what is now stored in the song after the embedded metadata changes have been made. So if **Save artwork embedded within in song file** is set to **Always Replace** and **Save Artwork to File system** is set to **Yes, overwrite existing files** then both metadata and file system will have the same newly found artwork data. Whereas if **Save Artwork embedded within song file** is set to **Never** and **Save artwork to File system** is set to **Yes, overwrite existing files** then the embedded artwork metadata will not be modified and the file system will save whatever is currently embedded in the file. If nothing is embedded in the file then nothing will be saved to the file system.

So what you cannot do is find new artwork and **only** save it to the file system without saving as embedded data within the file itself.

Save cover art filename

If **Save cover art to file system** is enabled this defines the name that should be used for the artwork files created, it does not include the file type part because the file will be created with the same format as is embedded in the file itself.

Artist Artwork Options

Options to add artist artwork, this can include artwork for the *Track Artist*, *Orchestras* and *Composers* - not only the *Album Artist*. Artist artwork can be automatically retrieved from online sources such as Wikipedia.

Find artist artwork for these types

Find artist artwork for these types of person, this can then be stored within your audio files and also directly on your computer, the current list is *Album Artist*, *Track Artist*, *Composer*, *Conductor*, *Orchestra*, *Lyricist*. If artwork is found for a particular artist type it is automatically added to your audio files.

We do special processing for the *Album Artist*, if the album artist is made up of multiple artists and we can find images for each album artist we try to sticth the images together to create asingle image that represents the album artist.

Save album artist to artist folders in filesystem

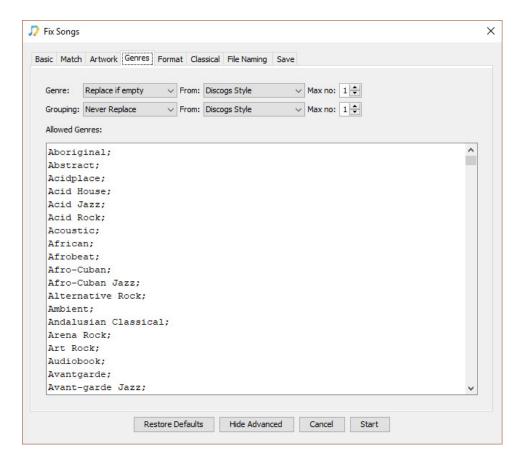
Save album artist artwork to each Artist folder. Can be useful if using UPnP server and like to *browse music by folder*. The album artist wil be stored as a folder.jpg file within the each Artist folder and this means that your uPNP control point should use the artist image as the folder image.

Add all artist artwork to folder

SongKong can add all the artist artwork found to a single folder, named by artist name, can then be used by some UPnP servers. Each image file is named based on the artist name that the image represents.

Fix Songs Genres Options

Options that decide how SongKong handles genres, all these options are ignored if **Update Genres** is disabled on the **Basic Options** tab



Genre

Specify how or if you want the **Genre** field to be populated, you can specify the source and the maximum number of genres you want to add. Discogs releases contain both high level **Genre** and one or more detailed **Styles**, usually an album only has one genre and the genre is too high-level to be that useful. When added to the Genre field the genres are added as separate values, some applications may only see the first value

- Genre: Replace if empty, Always add values, Always replace values or Never Replace
- From: Use Discogs Style, Discogs Genre or both
- Max no of Genres, songs are often associated with multiple styles this specifies the maximum number of values to add, note that even if multiple genres are added some applications will only display the first genre

Grouping

Specify how or if you want the **Grouping** field to be populated, you can specify the source and the maximum number of genres you want to add. Genres are added to a single field allowing all genres to be search for within one field, the grouping field is often used in iTunes as a way of supporting multiple genres for a song.

- Grouping: Replace only if empty, add values, replace values or do not modify field
- From: Use Discogs Style, Discogs Genre or both
- Max no of Genres, songs are often associated with multiple styles this specifies the maximum number of values to add

Warning: this field was originally for storing Classical music works and since iTunes 12.5.3 is now used for this again for MP3 and AIF formats, if you have Classical Music in your collection you should think carefully before using this option for grouping genres.

Allowed Genres

When songs are matched to a Discogs album we check the genres provided by Discogs for that release against the genres listed below, if the Discogs album has multiple genres in this list then we use the genre that comes earliest in this list, so the order of the list is important - if you want to keep them you should put more specialist genres such as **Power Pop** before more general categories such as **Pop**. If no match is found no genres will be added to songs matched to that release. Having found a match SongKong uses that value if that is the only value on the line, but if there is a ';' and then a second value it will use that second value, this is useful for mapping multiple similar genres to a single genre.

The Genre list is a text file that can be edited independently of SongKong if you wish.

Example: Map three genres to one

All three genres are mapped to a more generic genre when such specific genres are not required

Black Metal; Metal Goth Metal; Metal Doom Metal; Metal

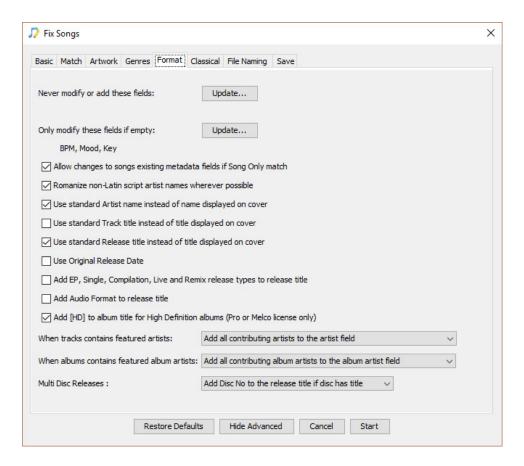
Example: Dealing with spelling variations

Maps Bossa nova to Bossanova, Bossanova is allowed through untouched

Bossanova Bossa nova;Bossanova

Fix Songs Format Options

Options that define how to best use MusicBrainz and Discogs data for your own needs.



Never modify or add these fields

When SongKong identifies songs all the standard metadata such as song title, artist, release title are automatically updated. But there are some specialist situations when you might not want SongKong to update certain fields. With the exception of a few fields always required by SongKong you can specify that certain fields are never modified by SongKong.

You may want to limit the number of fields added to a minimal set and do not want to add fields you have no requirement for.

If are using SongKong to match songs against home compilations tapes that do not exist in the official databases then you may want to maintain your custom track numbering by adding **Disc No**, **Disc Total**, **Track No** and **Track Total** fields to this option.

SongKong also completes the various Sort Artist fields, this is usually very useful because it allows artists to be sorted more sensibly then using their actual name, in English a particular problem is the number of bands whose name begins with **The**, but of course it is not usually helpful to have so many bands grouped under the letter **T**. But if SongKong only matches some of your songs it can cause problems in iTunes if some songs by an artist have an **Artist** and a **Sort Artist** and some do not. Some customers just prefer not to use sort artists so they can be disabled.

Only modify these fields if empty

There may be fields that you have entered the data manually or from another source and you do not want SongKong to modify this existing data. With the exception of a few fields always required by SongKong you can specify that certain fields are only modified by SongKong if they are currently empty, so no existing data is modified.

By default the BPM, Mood and Key fields are included in this list

Allow changes to songs existing metadata fields if Song Only match

When SongKong can match a song but not determine the album it will update song metadata such as song title but not album metadata such as **Album Title** or **Track No** regardless of any existing metadata. This means that the song is identified and updated with useful metadata without making any changes that would prevent it being identified as part of the same group on a subsequent run of **Fix Songs**.

However even modifying only **Song Only** metadata such as the **Song Title** or **Track Artist** could still change values significantly so that there is a difference between these songs and the totally unmatched songs. This difference is more likely when dealing with Classical release since there is not a single standard way that these fields are used with Classical music, for example you may have some songs where the work has been included in the song title and others where only the movement is used. If you disable this option then it will only update fields that are currently empty and this may better preserve consistency if some songs in an album are matched song only and some are not matched at all. The disadvantage of disabling this option is this can prevent SongKong replacing existing incorrect metadata with correct metadata.

Romanize non-Latin script artist names wherever possible

If the artist names is in a non-Latin script such as Chinese, Japanese or Cyrillic its Latin equivalent will be used if available. This is very useful for Western speakers who typically only can only pronounce Latin script but may have music from other cultures because then it allows them to pronounce the names of any of the artists in their collection. The Latin name is often stored as an additional alias within the original MusicBrainz database, it maybe a transliteration of the original name or an alternative Latin based name that the artists is known by in the Western world. The SongKong database additionally links Discogs artists to the corresponding MusicBrainz artist if it exists so that now you can often get Latin names even when your songs only match a Discogs album and not a MusicBrainz album.

This option will not just romanize performers it will also romanize all individuals associated with the release such as composers, conductors and engineers.

Use standard Artist name instead of name displayed on cover

Sometimes an artist may use a different name on some of their releases, this can make it harder to manage your collection so if you enable this option then their standard name is always used.

Use standard Track title instead of title displayed on cover

Sometimes a song is given another name on a different release, to force a consistent name to be used enable this option.

Use standard Release title instead of title displayed on cover

Sometimes a release is given a different name in a different version of the release, to force a consistent name to be used enable this option.

Use Original Release Date

SongKong contains a **Year** field and an **Original Year** field. Usually the year field stores the year the date of the release your songs have been matched to, and then for each song the original year contains the date of the first release that each song was released on, so all songs matched to the sdame release wiuld have the same value for the **Year** field. But sometimes it is more interesting to know the original year than the year and this is accessible to more applications then if it is stored in the original year field.

Warning:If you do enable this option and you have SongKong configured to rename songs from filename then you should not use Year to name folders as part of the rename mask because this could cause your songs to be split into multiple folders since songs in a release can have different original release dates.

Add E.P, Single, Compilation, Live and Remix release types to release title

It can be useful to identify when a song had been matched to a single, compilation etcetera rather then the more usual album. By enabling this option the type of the release is added to the release title field, if the release is of type album then this is not added because this is the default.

Use standard Release title instead of title displayed on cover

Sometimes a release is given a different name in a different version of the release, to force a consistent name to be used enable this option.

Add audio format to release title

If you have transcoded an album into multiple audio formats it can be useful to add the audio format to the release title to aid identification.

Add [HD] to album title instead of title displayed on cover

Lets you easily distinguish between HD and non HD albums by adding [HD] to the album title.

When tracks contain featured artists

Sometimes tracks are credited to multiple artists, and with the default **Add all contributing artists to the artist field** option set all these artists will be used in the artist field for this song. But sometimes this can make it difficult to organize your songs because songs by the same main artist can be split up by your music player, if the artist worked with a number of contributing artists. To make things simpler we can ignore these additional artists by selecting the **Only use main artist in the artist field and discard other artists** option. Alternatively if you don't want the featured artists information to be completely lost they can be added to the title field instead with the **Only use main artist in the artist field and add others to the title field**. Note if a song is equally credited to multiple artists then the multiple artists will be added to the artist field whatever option is selected, the options only have an effect when there is a main artist and featured or guest artists.

When albums contain featured albums artists

Sometimes albums are credited to multiple artists, and with the default **Add all contributing artists** to the album artist field option set all these artists will be used in the album artist field for songs of this album. But sometimes we are just interested in the main album artist so we can ignore these additional artists by selecting the **Only use main artist in the album artist field and discard other artists** option. Note when the album is equally credited to multiple artists then the multiple artists will be added to the album artist field whatever option is selected, the options only have an effect when there is a main artist and featured or guest artists.

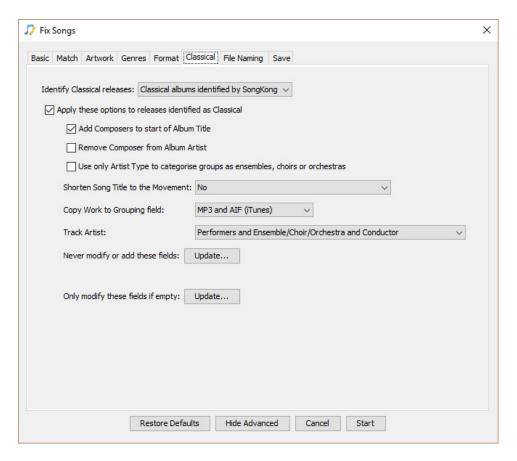
Multi Disc Releases

The **Disc No** field is very useful in multiple disc releases, for example to distinguish between the first track on disc 1 and the first track on disc 2. But not all applications provide access to this field so it can be useful to add to the release title by setting this option to **Always Add Disc No Information** to the release title. Multi-disc releases sometimes give an actual name to each disc and this can be added to the release title by setting the option to **Add Disc No to the release title if disc has title.** Or you can elect to do nothing special for multi-disc release by setting the option to **Never add Disc No information to the release title**.

Warning: Enabling this option would cause different discs of one release to have different titles this can cause some applications to treat each disc as a different release rather than as a disc of the same release

Fix Songs Classical Options

Options specifically for Classical releases because the tagging requirements for Classical music are typically different then for other music genres.



Identify Classical releases

SongKong uses various way to identify Classical tracks, if a song does appear to be a Classical piece then the IsClassical field is set. Usually it is best to let SongKong to decide if a release is classical or not by keeping the default option of Classical releases identified by SongKong. But some releases are difficult to assess. If all you know all the releases you are matching in this run are Classical then you can set this option to All releases treated as Classical to force SongKong to treat all matched songs as classical and set the isClassical field. Alternatively if you consider none of the releases to be Classical then you can set this option to None, no releases treated as Classical to force SongKong to treat all the songs to none classical, clearing any values previously set for the IsClassical field

Apply these options to releases identified as Classical

If this option is enabled then whenever a song is identified as classical the options on this tab are applied to it, they are not applied to Non Classical.

Add Composers to start of Album Title

Classical music albums often contains the composer name as a part of the album title but not always. Different composers often named their works simply such as *Symphony No 1* so without the composer

name it can be difficult to distinguish one album from another. With this option enabled SongKong will add the composer(s) surnames to the start of the album title if the composer is not in the current title to help with easier album identification.

Remove Composer from Album Artist

The **Album Artist** usually reflects what is written on the spine of the physical release, it usually consists of the **Composer**(s) of the Classical music on the release, and the principal performers and choir, orchestra or other ensembles involved, the Album Artist helps to distinguish one release from another.

But if you additionally use the Album Artist to identify only the main performers you can use this option to remove the Composer from this field, since they are not a actually a performer. Using the Album Artist instead of the Track Artist to identify performers allows you to concentrate on the main performers of the release as a whole without catching a performer that may only have performed on a single track on the release.

Only use Artist Type to categorise groups as ensembles, choirs or orchestra

Every artist in MusicBrainz is categorised as either a choir, orchestra, group or person. But sometimes a group may be a credited as an orchestra or choir on a particular release, and when this occurs we credit that artist as an orchestra or choir for the particular songs in that release. However this can mean that within your songs metadata the same artist is sometimes added to the **Orchestra** or **Choir** field and sometimes the **Ensemble** field depending on what release the song is from, if instead you wish a particular artist to be categorised the same way throughout your collection enable this option.

Shorten Song Title to the Movement

Classical Music often comprises a series of works, with each individual piece a movement within a work. When SongKong detects that a release contains multiple movements from a work it adds information to the **Work**, **Movement**, **Movement No** and **Movement Total** fields, often an album contains multiple works so adding this information allows songs to be organized by work rather than by album. Whenever a movement is linked to a work within MusicBrainz data then the **MusicBrainz Composition** and **MusicBrainz Work** fields are completed, but the **Work** and **Movement** fields are only used when movement is part of a multi movement work on the album. If the album is simply a compilation of extracts of different classical works and only contains single movements of works then these fields will not be added for those tracks.

The **Shorten Song Title to the Movement** option can be used to shorten the **Title** field to the movement because typically the title comprises both the work and the movement and such a title can become long and unwieldy, currently the Movement field is not well supported so most players would use the Title field for all songs and ignore the Movement field.

Options provide are:

- No
- Yes
- · All formats except ones recognised by iTunes

However since iTunes 12.5.3 iTunes natively supports the **Work**, **Movement**, **Movement No** and **Movement Total** fields so there is no real need to shorten the Title field if you only use the iTunes player. If you have SongKong configured to update iTunes it will transfer these fields to iTunes but you do need to tell iTunes to use these fields instead of **Title** and **Album** as follows:

· Select all songs that have movement/work set

- · Select Get Info
- Enable the Use Work and Movement checkbox

Copy Work to Grouping field

The original metadata format was ID3 and this defined a field called **Grouping** that was intended to be used to store the work for Classical music, but it also had other uses, it was defined as

"The 'Content group description' frame is used if the sound belongs to a larger category of sounds/music. For example, classical music is often sorted in different musical sections (e.g. "Piano Concerto", "Weather - Hurricane""

This definition is a bit open to interpretation so over the years the field has been used by different applications in different ways, both as a work and as a way to group multiple tracks in other ways. For example in SongKong it can be used to store genres as a list of values because iTunes **Genre** can only see the first value, a problem if you want to categorize a song with multiple genres.

So SongKong uses a separate **Work** field to store the work, but depending on what audio formats and what audio players you are using you may want to copy the contents of the Work field to the Grouping field. So for example iTunes uses the Grouping field to store the work for formats that use ID3 such as **MP3** and **AIF**, but it has a separate Work field for **MP4** and **M4A** files, and this is the same as the Work field that SongKong uses for this format.

If you are using Flac/Ogg your player may expect works to be stored in the Grouping field or the Work field or have no support at all for works

So we provide the following options for this option:

- No
- Yes
- MP3 and AIF (iTunes)
- All audio formats except MP4

Track Artist

In Pop/Rock there is usually a single performer or band who is credited. They are often the composer of the song as well but if they are not the details of the writer are not usually so important, the artist credits on the release itself make it clear who should be credited for each track.

In Classical music, usually various performers, an orchestra or choir, a conductor and a composer are all credited. This means we potentially have a long list of people credited for each track, and we don't have an accepted order they should be added in. Previously the Composer was used for the **Artist** field, but as the **Composer** field is better supported in most players (such as iTunes) we usually we no longer need to add the composer to both the Artist and Composer field. In fact doesn't really make sense to add the Composer to the Artist field any longer for Classical music because often the music was composed many years ago and they were not involved in the actual recording in any way.

The default for SongKong is to store the , **Performers**, **Ensemble/Choir/Orchestra** and **Conductor** in that order, but we offer different masks for different uses.

If you have a particular interest in MusicBrainz, we also offer the option to use the MusicBrainz artist fields directly. For Classical music the MusicBrainz database typically stores the Composer in their MusicBrainz Track Artist Credit field and the performers and conductor in the MusicBrainz Recording Artist Credit field but this is not always applied consistently.

Never modify these fields

If song is categorised as Classical then any fields listed here will not be modified, this is in addition to any fields already added to **Never modify these fields** option on the **Format** tab

Classical/Jazz releases are not so well served by existing media players so sometimes novel approaches are sometimes used and SongKong can leave any fields alone just for your Classical recordings if you wish.

Only modify these fields if empty

If song is categorised as Classical then any fields listed here will only be modified if currently empty, this is in addition to any fields already added to the **Only modify these fields if empty** option on the **Format** tab

For example Classical releases often consist of a number of works on a single album and if you have manually used work numbering rather than album numbering you can protect this by setting this by adding **Disc No, Disc Total, Track No** and **Track Total** to this list.

Other Classical Considerations

In Pop/Rock an album usually represents the artistic intent of the artist, i.e. the album was conceived and created as a single body of work.

In Classical it is more complicated. Classical composers work in terms of Symphonies or Sonatas rather than albums, we call these **Works**. These works comprise sub works or **movements**, and there may be additional levels. When Classical music and released as an album it may only contain part of a work, or conversely multiple works, so the album grouping may not be the most important grouping.

SongKong captures this data and stores in additional fields. This data can be used in your rename mask and it can also be used by Players, and UPnP Streamers to index your songs by these new fields.

Classical fields are described below, exactly how they are stored depends on the underlying file format as described in the **Field Mapping** section of the report.

Works and Movements

We have to consider two types of work information. Most importantly there is the work information as defined on the album your songs have been matched to, this information allows us to fill in the , **Movement, Movement No, Part, Part Number, Movement Total** and **Work** fields, for this information to be useful ion music playback we only add this information when a track represents one of more than one movements for a work on that album.

The difference between **Movement** and **Part** is simply that Part also includes the Part Number, Movement does not.

The difference between **Movement No** and **Part Number**, is that Movement No is in decimal, and Part Number uses the more usual Roman numbering.

It doesn't matter if the album represent a single work or multiple works as long as it has more than one movement for each work, whereas if you have a compilation album that contains individual movements from different works these would not have this data added as single movement works are not helpful for grouping.

However this work information may be useful for other reasons so if a track is linked to a work (usually this is actually a movement) within MusicBrainz then we store this work in the **MusicBrainz Work Composition Name** field, and the top level work that this is part of in the **MusicBrainz Work** field,

sometimes they are the same thing. Usually there are just two level of works but where there are more than two levels of works they are stored in the **Work Part LevelN** field, where N can go from 1 to 6 levels.

Each Work may also a have **Part Type** such as Opera or Sonata. The fields are **Work Type**, **Part Type**, **Work Part LevelNType**

If the work or song has an Opus number we store that in the **Opus** field

If the song title contains a nickname we store that in the Classical Nickname field

If the song title contains an alternative cataloging no we store that in the Classical Catalog field

Orchestra

If an orchestra can be identified they are added to the **Orchestra** field and also the **Orchestra Sort** field.

Choir

If a choir can be identified they are added to the **Choir** field and also the **Choir Sort** field.

Ensemble

If any type of ensemble can be identified that is not either an Orchestra or a Choir they are added to the **Ensemble** field and also the **Ensemble Sort** field.

Performer

When performers are credited we add them together with their instrument or singing part to the **Performer** field, these are usually but not necessarily individuals.

Performer Name

All individual performers are listed for easy indexing to the **Performer Name** field and the associated **Performer Sort** field.

Example

An example for the first song on this MusicBrainz release http://musicbrainz.org/release/58af4926-6fd2-4c1d-9628-f3ffab3eff25

Table 1. Classical Field Name Example

Movement	Allegro non troppo
Work	Piano Concerto no. 2 in B-flat major, op. 83
Movement No	1
Movement Total	4
Work Composition Name	Concerto for Piano and Orchestra no. 2 in B-flat major, op. 83: I. Allegro non troppo
Part	I. Allegro non troppo
Part Number	I
Work Type	Concerto

MusicBrainz Work	Concerto for Piano and Orchestra no. 2 in B-flat major, op. 83
Opus	83
Orchestra	Wiener Philharmoniker
Orchestra Sort	Wiener Philharmoniker
Performer	Krystian Zimerman (Piano)
Performer Name	Krystian Zimerman
Performer Name Sort	Zimerman, Krystian
Conductor	Leonard Bernstein
Conductor Sort	Bernstein, Leonard
Composer	Johannes Brahms
Composer Sort	Brahms, Johannes

Advanced modification of Classical Identification

One way that SongKong identifies classical releases is looking for releases that have credits to particular people known to work only on Classical music. This list is available within classical_people.txt, here is a small section, each line has the MusicBrainz Artist Id and then Artist Name

```
1f9df192-a621-4f54-8850-2c5373b7eac9 = Ludwig van Beethoven d01c08ad-f09f-4396-b8a7-e27ae146ea27 = Ludwig von Széchényi 5a4ae8d0-7ee4-4e83-bb89-1cfc9cf63d8b = Ludwik Osi#ski 676bf1b0-b834-4117-86d2-ceba42fac051 = Luigi Badia 688986c3-da7b-4465-92cb-f4736c94f2cd = Luigi Balestra cc272df6-a476-4d30-9ede-a47db04d8813 = Luigi Bassi 5c1a3f8f-d5e5-4dcd-9e44-9443f06bb77d = Luigi Boccherini d6077dc7-7bdb-4cc8-9425-fb80bf2dff41 = Luigi Caracciolo 375d52ad-5b7a-4f96-80e2-6d9ad13f5160 = Luigi Gordigiani
```

The term Classical is used here in the most general sense so that anyone who died before music could be recorded is included plus Classical composers and conductors of the 19th and 20th century, in total there are about 6000 people listed. If you are finding that certain releases credited to a particular person are being classified as Classical when you do not want them to be you can search this file for that person and remove that line, you can also add people to this file using the format MusicBrainz $Artist\ Id = Name$

The first time you start SongKong the classical_people.txt file is copied from the installation folder into the user preferences location, and this is the file that SongKong will use. So you'll need to edit the file in this location for it to have any effect, see **Section 12:Command Line** for details of this location.

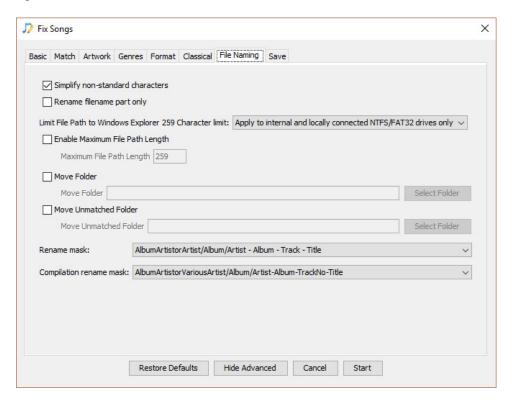
There is also a **classical_composers.txt** file, like all automated music taggers SongKong is always dealing with incomplete databases, a particular problem for classical music is that the database may have the list of credits for a release but not their particular role, e.g. Is Person B a composer, performer or conductor. SongKong has created a list of people who principal activity is composing so when we find this person credited on a release we can usually assume that they are the composer even if they do not have a composer credit on that particular release.

The smaller classical_conductors.txt list works the same way for conductors, both these files can be edited in the same way as the classical_people.txt file in order to fine tune your classical metadata requirements. If a person is a composer and conductors (or performer) then they will not be included in the composer/conductor list unless the vast majority of their credits are for one particular role.

The **not_classical_release.txt** list is an exception list to specify releases that should never be considered a Classical release. Some releases are borderline Classical and SongKongs algorithm can sometimes get it wrong, adding a MusicBrainz Release Id and a title to this list ensures that SongKong does not treat these releases as classical when using its identify classical algorithm.

Fix Songs File Naming Options

Options that define how files are renamed from metadata.



Simplify non-standard Characters

Some characters may not be compatible with the file names on some file-systems so this option replaces such characters with their simpler equivalent (i.e. $\acute{e} \rightarrow e$, $\# \rightarrow e$ and $\# \rightarrow <$) if **Simplify non-standard characters** is enabled. Simplification of file names can make managing your files easier and provide greater compatibility with other applications.

This option is similar to the **Convert to ASCII** option found in some applications but ASCII only supports a subset of the Latin character set, characters sets such as Chinese, Korean and Arabic cannot be converted to ASCII so we do not try, but we can simplify file names in four main ways.

- 1. We simplify Latin char set by removing diacritics such as accents and circumflexes (é -> e)
- 2. Sometimes complex characters can be represented as a combined character (NFC) or two different characters (NFD) we always convert NFD to NFC
- 3. We simplify unusual representations of letters and numbers such as subscript or superscript (# ->e)
- 4. We replace symbols and graphic characters with simpler representations (#-><)

Rename file name part only

The complete file path of a file comprises of the **Base Folder**, **Sub Folder**s and **File name**. When this option is enabled **only** the file name part will be modified using the file name part of the defined rename mask. This allows files to be renamed base don new metadata without modifying structure.

The common reason for using this option is as follows. You have a folder containing songs that have not been tagged, the folder either represents an album that is not known to the Albunack Server so with the default matching options SongKong is unable to match the songs. You decide to uncheck the **Only allow match if all songs in grouping match to one album** option on the **Basic** tab to give the SongKong the best chance of finding a match. And because the existing tracks are just labelled Track1.mp3, Track2.mp3 you want to **Rename files based on Metadata** to give the files more useful names, but you don't want the tracks to be moved because you know they all belong to one album. Enabling **Rename file name only** allows you to do this.

Regardless of the rename mask selected only the name part of the rename mask will be used to replace the name part of the existing file path. So if the existing file path has sub-folders they will remain even if the rename mask **does not**have a sub-folder component. If the existing file path does not have sub-folders then no sub-folders will be added even if the rename mask **does have** sub-folders.

e.g... assuming the song actually is With or Without You by U2 on the Joshua Tree album

Existing filepath /Music/U2/Best Of/Track1.mp3 gives Base Folder=/Music, Sub Folder=U2/The Joshua Tree and File name=Track1.mp3

Rename Mask: Artist/Album/TrackNo - Title, Rename file only:false would give

/Music/U2/The Joshua Tree/03 - With or Without You.mp3

Rename Mask: Artist/Album/TrackNo - Title, Rename file only:true would give

/Music/U2/Best Of/03 - With or Without You.mp3

Rename Mask: TrackNo - Title, Rename file only: false would give

/Music/03 - With or Without You.mp3

Rename Mask: TrackNo - Title, Rename file only:true would give

/Music/U2/Best Of/03 - With or Without You.mp3

Enable Maximum File Path Length

When renaming or moving files SongKong respects the file system limits set by the operating system, most notably Windows set a limit of 260 characters for the complete path. But some legacy applications may impose short maximum lengths, or you may use SongKong with one operating system but want the files to be compatible with another.

The **Maximum File Path Length** option provides an easy way to set a maximum filepath length, if the file name is too long the file name part will be truncated accordingly. A more powerful approach is modify your rename mask to set different maximum lengths for different parts of their mask using the inbuilt JavaScript **substring** function.

Move Folder

A common way of managing your songs is to move songs from an unsorted folder to a fixed folder as they are identified. Within SongKong this can be accomplished by setting a **Move Folder**, as songs are matched they are moved from their current folder to the move folder. SongKong moves songs if they are matched to a MusicBrainz album or a Discogs album, they are not moved if only matched to a MusicBrainz song as this is considered only a partial match.

When a song is moved to a new folder the new folder replaces the **Base Folder** part of the original file name. If **Rename files based on metadata** on the **Basic** tab is unchecked the rest of the file name is unchanged from the original file name, if the option is checked then the rest of the file name will be derived using either the **Rename Mask** or **Compilation Mask** you have selected on the **File Naming** tab.

Move Unmatched Folder

If SongKong is unable to match a song to either MusicBrainz album or Discogs album then it is unmatched, usually this means that the file is not renamed but you can still move these files to the **Unmatched Folder** if you enable the option. Songs that are only matched to a MusicBrainz song but not an album are still moved to the unmatched folder because otherwise if some songs in a folder are matched by song only and some are not matched at all then the folder would be split. If you are only trying to identify songs and are not concerned about albums you should disable this option.

This option is useful because it allows you to differentiate between a song that SongKong has tried to match and failed to match, and a song that SongKong has not yet attempted to match. It is especially useful when processing many files if for any reason Fix Songs did not fully complete.

Rename Mask

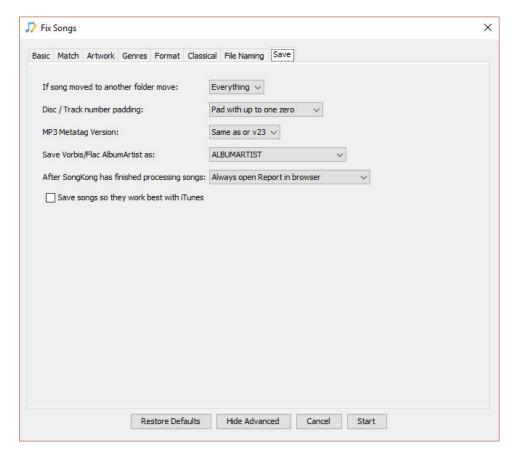
The **Rename mask** defines how files renamed based on their metadata. You can select from any of the defined masks using the drop-down. The list of available masks is the same in the Rename mask, compilation mask and file name masks drop-downs. You can create new filename masks oro modify existing ones from the **Preferences** menu.

Compilation Rename Mask

It is often useful to store Compilation releases in a different location to Original Album releases. This mask is used when renaming songs that have been identified as being part of a compilation, the **isCompilation** field is set for these fields. The **compilation mask** defines how files renamed based on their metadata. You can select from a number of defined masks using the drop-down.

Fix Songs Save Options

Defines options that modify how the contents of songs are saved to file.



If song moved to another folder move

If song moved to another folder move lets you control what should happen to non-music files in your folder when music files are saved to a different location, this occurs if you rename files from metadata and new metadata changes the sub-folder part of the file name path, or if you have selected a move folder that all matched songs should be moved to.

The default is to move artwork with the music, but you can also choose to only move the music or conversely to move everything in the folder.

MP3 Metatag Version

MP3s support both **ID3v23** and **ID3v24**. V24 is the latest version of the ID3 Specification and has been available since 2003 but it still is not as widely supported as V23. You can elect to save your MP3s using the version they already have or force save to either V23 or V24.

Disc / Track Number Padding

Most audio formats stores numbers as text, for example 1 can be stored as 1, 01, 001 or 0001. This is useful for sorting songs and is applied to the **Disc No, Disc Total, Track No** and **Track Total** fields. this field has no effect on the Mp4 files because this format only stores a number.

Save Vorbis/Flac Album Artist as

Unfortunately because Vorbis comments are free text fields where both the field name and value are freely editable, minor yet absolute differences can emerge. In this particular case because the human readable abstraction **album artist** has a space in it, different software and hardware have taken different decisions in what to do with the space. So some players such as Foobar2000 use **ALBUMARTIST**, whilst other most notably JRiver use **ALBUM ARTIST**, some players support both but prefer one value to the other. SongKong defaults to using **ALBUMARTIST**, but if you find this field is not being displayed in your preferred player you should change it to **ALBUM ARTIST** or **ALBUMARTIST** and **ALBUM ARTIST**

Save songs so they work best with iTunes

For mp3s in ID3 there is a preconfigured list of 256 genres, if a genre is in this preconfigured list it is stored as a number rather than the text. But iTunes does not understand the complete list of genres so you can force **SongKong** to always write the genre as text if you enable this option.

iTunes prefers that for **Various Artists** compilations that **Album Artist** and **Sort Album Artist** are left blank so that iTunes can provide translated versions

Fix Songs Report Options

By default after finishing process SongKong opens the report detailing all modifications made. But if you find this annoying you can set **After SongKong has finished processing songs** to **Never Open Report in Browser**. You can also set it to only display when something was actually modified with **Open Report if some changes were made**

Acoustic Analysis

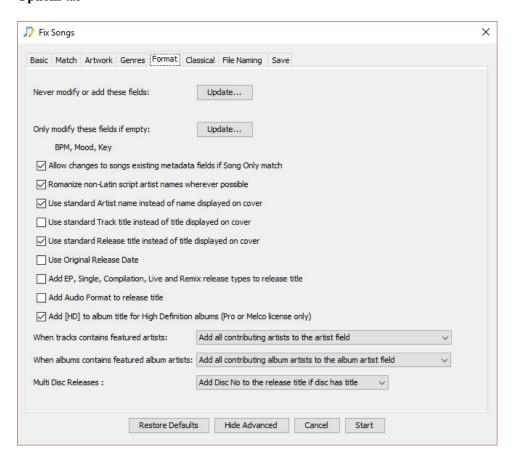
SongKong **Pro** can use acoustic analysis to determine additional features of your songs. With other solutions the software has to listen to each song to calculate the acoustic analysis, this is time consuming and CPU intensive. But SongKong Pro does not have to do this, the songs for nearly three million songs have already been analysed and results of the acoustic analysis is already stored with

the song in the Albunack Server, so there is no additional time required to add fields calculated via acoustic analysis.

The three well defined fields that can be calculated are:

- BPM
- · Key Scale
- Mood

The algorithms used to accurately calculate these three measures are still evolving and can be done in different ways. So SongKong gives you the option to only add these values if they don't currently exist in the song, add regardless and overwrite any existing values or not add at all. All these options are ignored if **Update Mood and other acoustic attributes such as BPM** is disabled on the **Basic Options** tab



BPM

BPM (Beats per minute) is a measure of the tempo of the song. In music written with a traditional score a particular note value (for example, a quarter note, or crotchet) is specified as the beat, and that the amount of time between successive beats is a specified fraction of a minute. The greater the number of beats per minute, the smaller the amount of time between successive beats, and thus faster a piece must be played.

BPM is particularly import in dance music because of its usefulness to DJs. In this context the beats measured are either quarter notes in the time signature or drum beats (typically bass-drum or another functionally similar synthesized sound), whichever is more frequent. Higher BPM values are therefore achievable by increasing the number of drum beats, without increasing the tempo of the music. House music is faster around 120–128 BPM, trance music ranges from 125 to 150 BPM, and drum and bass generally ranges between 150–180 BPM.

Key Scale

Key scale represents the scale that the majority of the notes played in a piece of music come from. For traditional classical music this is relatively simple since the key signature is defined in the staff of the musical notation and in usually adhered to throughout the piece. For Pop/Rock and Experimental music it is more difficult because the key scale can change during the piece, and non -standard scales can be used.

Mood

The mood of a piece is an indication of the ambience of a piece, for example it could be Calm, Aggressive, Happy or Sad. Calculating the mood is similar to genres, it is by its nature subjective there is no definitive answer. Mood can be calculated manually by listening to the music and selecting the mood but this can take a considerable amount of time, SongKong provides an alternative by analysing the music and selecting a mood based on the analysis.

This analysis can generate the following moods:

- Delighted
- Excited
- Astonished
- Aroused
- Tense
- · Alarmed
- Angry
- Afraid
- Annoyed
- Distressed
- Frustrated
- Miserable
- Sad
- Gloomy
- Depressed
- Bored
- Droopy
- Tired
- Sleepy
- Calm
- Relaxed

- Serene
- Glad
- · Pleased

Other Analysis

SongKong also adds other measurements, that can be useful, only SongKong adds this data to your songs so there is no danger of replacing data added by other providers. The attributes give a probability of something rather than a definitive true or false answer in the range of 0 - 100. So for example the **Instrumental** attribute shows the probability of a song being totally instrumental, if the track had somebody introducing the track at the start the value would not be 100 but it would still be higher than somebody singing all the way through. If the value is less than 50 this indicates the that the measure is false, so for Acoustic that would be mean it probably was not acoustic.

The attributes added are:

- Acoustic
- Electronic
- Instrumental
- · Tonality
- · Mood Aggressive
- · Mood Relaxed
- Mood Happy
- Mood Sad

We also add two special measures that are used to work out the Mood with a range of -100 to 100, these measure are called

- Valance
- Mood

Acoustic

Does the song use acoustic or non-acoustic instruments

Electronic

Does the song use predominantly electronic based instruments such as synthesizers

Instrumental

Is the song predominantly instrumental or is there singing or talking.

Tonality

A measure of the songs tunefulness

Mood Aggressive

Is the mood of the song aggressive

Mood Relaxed

Is the mood of the song relaxed, this in many ways the opposite of Aggressive but it calculated using a different algorithm

Mood Happy

Is the mood of the song happy

Mood Sad

Is the mood of the song sad, this in many ways the opposite of Happy but it calculated using a different algorithm

MusicBrainz Release Match

If song(s) are matched to a MusicBrainz album there are many fields that can be added to your song from the matching MusicBrainz album.

The following fields are always available for a matching MusicBrainz album:

Table 2.

Field name

Album

Album Artist

Album Artist Sort

Album Artists

Album Artists Sort

Album Sort

Artist

Artist Sort

Artists

Artists Sort

Disc Number

Is Classical

Is Compilation

Is Greatest Hits

Is Soundtrack

MusicBrainz Artist Id

MusicBrainz Release Artist Id

MusicBrainz Release Group Id

MusicBrainz Release Id

MusicBrainz Track Id

Release Status

Release Type

Title

Total Discs

Total Tracks

Track Number

These fields **may be** available from the matching release:

Field name

AcoustId Fingerprint

AcoustId Id

Arranger

Arranger Sort

ASIN

Bar-code

Catalog Number

Classical Catalog Number

Classical Nickname

Comment

Choir

Choir Sort

Composer

Composer Sort

Conductor

Conductor Sort

Copyright

Country

Cover Art

Date

Discogs Artist Site URL

Discogs Release Site URL

DJ Mixer

Engineer

Ensemble

Ensemble Sort

Genre

Grouping

Instrument

ISRC

Label

Language

Lyricist

Lyricist Sort

Media

Mixer

Movement

Movement No

Movement Total

MusicBrainz Original Release Id

MusicBrainz Work Id

Field name MusicBrainz Work MusicBrainz Work Composition Official Artist Site URL Official Release Site URL Original Album Original Artist Original Lyricist Opus Orchestra Orchestra Sort Overall Work Part Part Number Part Type Performer Performer Name Performer Name Sort Producer Release Country Remixer Script Tags Wikipedia Artist Site URL Wikipedia Release Site URL Work Work Type The following fields derived from acoustic analysis may be added with SongKong Pro version only Table 3. Field name **BPM** Key Scale Mood Acoustic Electronic Instrumental Tonality

Mood Aggressive Mood Relaxed Mood Happy

Field name

Mood Sad

Valence

Arousal

Discogs Matching

If song(s) are matched to a Discogs album either directly or via a MusicBrainz album there are many fields that can be added to your song from the matching Discogs album.

The following fields are always available for a matching Discogs album:

Table 4.

Field name

Album

Album Artist

Artist

Artists

Disc Number

Discogs Artist Site URL

Discogs Release Site URL

Release Type

Title

Total Discs

Total Tracks

Track Number

These fields may be available from the matching release:

Field name

Arranger

Bar-code

BPM

Catalog Number

Comment

Choir

Choir Sort

Compilation

Composer

Conductor

Copyright

Country

Cover Art

Date

DJ Mixer

Field name

Engineer

Ensemble

Ensemble Sort

Genre

Grouping

ISRC

Label

Language

Lyricist

Media

Mixer

Orchestra

Orchestra Sort

Official Artist Site URL

Official Release Site URL

Part

Part Type

Performer

Performer Name

Performer Name Sort

Producer

Release Country

Remixer

Script

Wikipedia Artist Site URL

Wikipedia Release Site URL

Fix Songs Report

Once matching has completed (or if you elect to cancel) a report is generated and opened automatically in your browser.

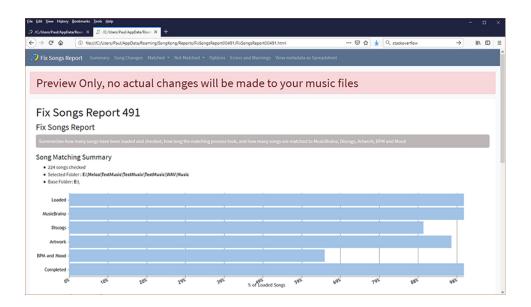
The left hand side of the report lists the sections, and the currently selected section is shown in the right side of the report. By default the report open the summary page, just select the section in the left hand-side of the report to see a different section. A complete report is generated even when SongKong is in Trial mode or Preview mode so that you can see exactly what changes it would have made.

Previous reports cane be reopened from the Reports menu

Note: You must have JavaScript enabled in your browser in order for it to be properly navigable

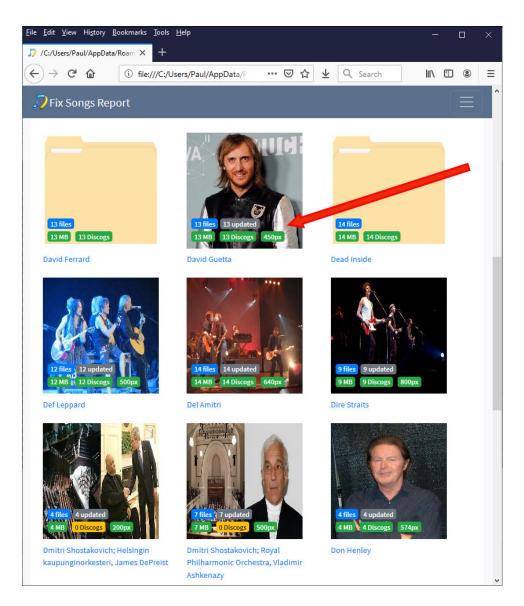
Summary

Summarizes how many songs have been loaded and checked, how long it took and how many and what percentage of songs have been matched to the various databases and any changes that have been made to your iTunes library if iTunes update is configured.



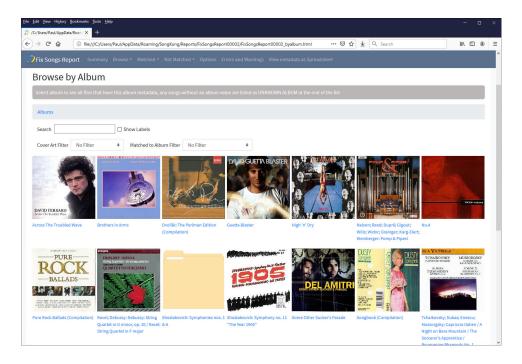
Browse

The **Browse** sections allow you to navigate your music in a very similar way to how you would if using a UPnP Control Point. You can browse by *Album Artist/Album*, *Album*, *Composer/Work* or *Folder*. At each level you can see the relevant artwork, artwork size and how many of the songs have been matched to **MusicBrainz** or **Discogs** release, and how many songs have been modified in this latest run of Fix Songs. Thesde badges can be hidden by unchecking the **Show Labels** option.

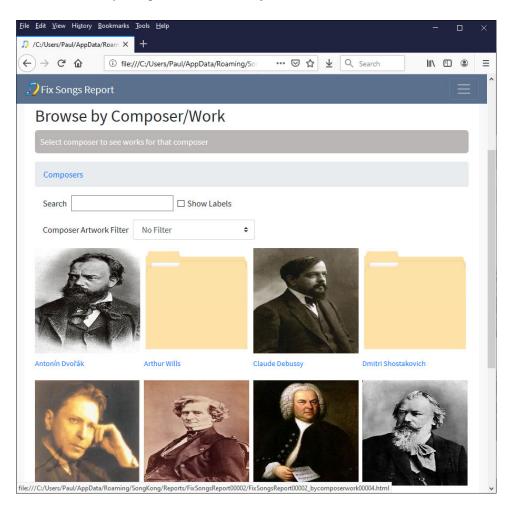


Each Browse section prides a free text search, simply start typing and non matches are filtered out.

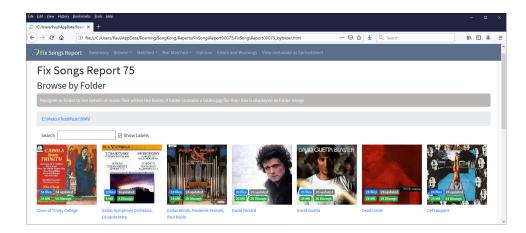
You can also filter to only show grouping that have/not have artwork



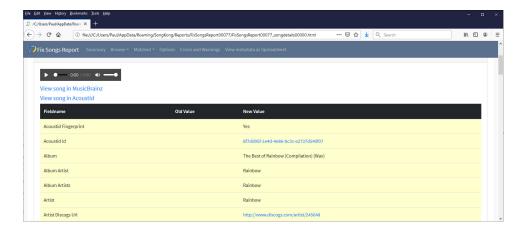
You can browse by Composer and Work, not just Album Artist and Album



You can also browse by Folder, this can be very useful if your songs metadata does not align with an Artist/Album folder structure



In all cases as you navigate down you can see all the songs and the full metadata for the selected Album, Work or Folder. This shows the value of every metadata field and if it has been newly added or modified, with links to online databases where appropriate, you can even play the song directly in your web browser.



Matched

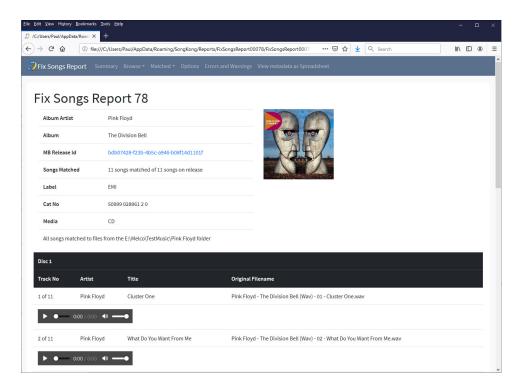
This section groups songs by the Album they have been matched to, linking directly to the album we have found on MusicBrainz or Discogs. If you have converted Naim wav rips we can also show you the All Music Guide release they are linked to. LIke the Browse sections you can drill down by artist and album but instead of using the value of your artist and album metadata we use the internal ids that are only added if the songs have actually been matched to MusicBrainz or Discogs. Whn you drill donw to album level you are thern shown a summary of the album, and how your files are matched to that album.

All Music Guide (Melco Only)

This shows what **All Music Guide** release songs your songs have been matched to when using the option **For Naim way files read the accompanying metadata files**.

Matched to MusicBrainz release

This shows what MusicBrainz releases your songs have been matched to

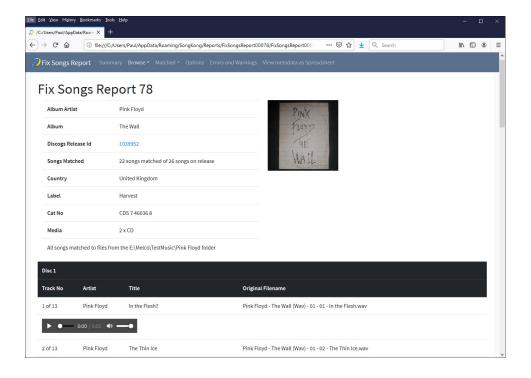


Matched to MusicBrainz song only

This shows what MusicBrainz songs your songs have been matched to when it is not possible to identify a release that a group of songs can be matched to but it is possible to identify the names of the individual songs (know as recordings in MusicBrainz terminology).

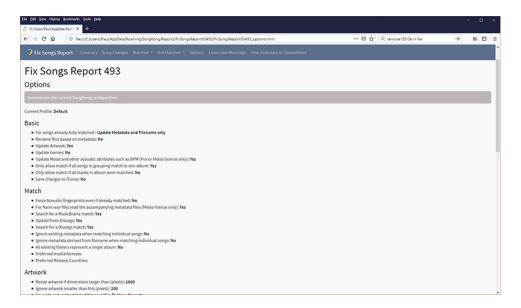
Matched to Discogs release

This shows what Discogs releases your songs have been matched to



Options

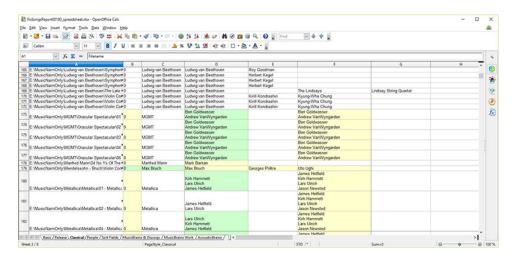
All options used can be seen by clicking on the *Options* link



View metadata as spreadsheet

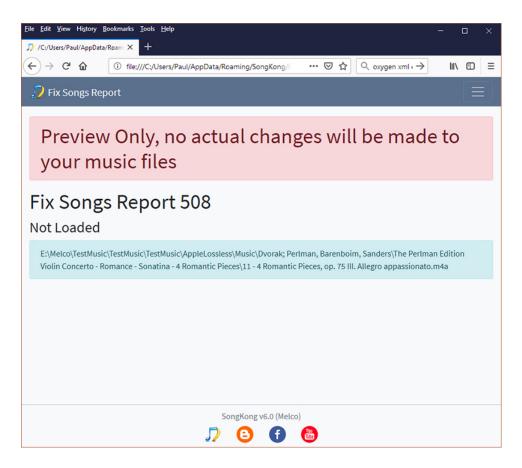
This option opens a spreadsheet (in the xlsx format) that lists all the songs processed together with their modified metadata (if running in **Preview mode** then it shows what the metadata would be if not running in Preview). Because SongKong can typically add a lot of different metadata we group the metadata into logical groupings over a number of sheets. The sheets are **Basic**, **Release**, **Classical**, **People**, **Sort Fields**, **MusicBrainz & Discogs**, **MusicBrainz Work** and **AcousticBrainz**, every sheet lists songs alphabetically by file name, the file name is in the first column of each sheet. When SongKong has added a metadata for a field that did not have any metadata for that field it is shaded **yellow**, when the field did already have metadata but it has now changed then it is highlighted **green**, if a field is deleted it is highlighted **red**

The spreadsheet view enables you to very quickly view multiple changes on multiple files.



Not Loaded

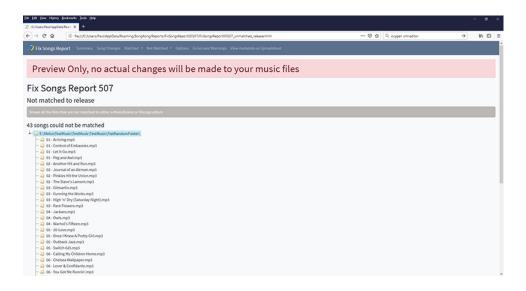
Shows any songs that could not be loaded because they seemed to be corrupt



Not matched to release or song

Shows all the files that are not matched to either a MusicBrainz song, MusicBrainz release or Discogs release in the right hand side using a file tree view. To be considered matched they need to have matched to either a MusicBrainz song, MusicBrainz release or a Discogs release. If matched to a MusicBrainz song but not a MusicBrainz release then SongKong will only update the metadata that is not release specific, so **Song Title** and **Track Artist** would be updated but not **Track no**, **Release Title** or **Release Artist**.

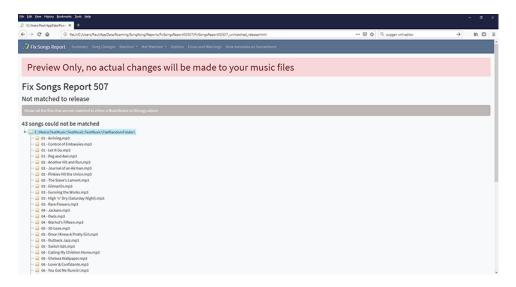
If you have songs that were previously matched to MusicBrainz or Discogs but were not matched during this last run of Fix Songs they will still be listed in the *Not matched section* because this section is designed to show those songs that could not be identified during the last run of **Fix Songs**



Not matched to release

Shows all the files that are not matched to either a MusicBrainz or Discogs release in the right hand side using a file tree view. Songs that were matched to a MusicBrainz song but not release are listed here.

To be considered matched they need to have matched a release not just a MusicBrainz song. If you have songs that were previously matched to MusicBrainz or Discogs but were not matched during this last run of Fix Songs they will still be listed in the *Not matched section* because this section is designed to show those songs that could not be identified during the last run of **Fix Songs**



Not matched to MusicBrainz release

Shows all the files that are not matched to a MusicBrainz release in the right hand side using a file tree view.

If you have songs that were previously matched to MusicBrainz but were not matched during this last run of Fix Songs they will be listed in the **Not matched to MusicBrainz** section because this section is designed to show those songs that could not be identified during thew last run of **Fix Songs**

Not matched to Discogs release

Shows all the files that are not matched to a Discogs release in the right hand side using a file tree view.

If you have songs that were previously matched to Discogs but were not matched during this last run of Fix Songs they will be listed in the **Not matched to Discogs** section because this section is designed to show those songs that could not be identified during thew last run of **Fix Songs**

Matching Strategies

The default options of SongKong are selected to work the best for the majority of customers, but of course everyone has slightly different requirements, in this section I discuss some important considerations when song matching.

How well organized is your collection currently?

Your collection may already all be well organized into artist/album folders representing each album, with perhaps sub folders for multi-disc albums, and each folder containing a full album. In this scenario you probably want to enable **Only allow match if all tracks in albums were matched**, but if some of your albums are not complete you would not want to.

Consider what was the original media format (CD, Vinyl, Digital) and country of release of the majority of your collection and set these options accordingly in **Match options** to ensure you get the optimum match.

If your folder contain a group of random songs that do not belong to a single album then SongKong with the default options SongKong will be able to match the songs to MusicBrainz songs but not MusicBrainz or Discogs albums. You may only be concerned with songs and not releases but if you disable **Only allow match if all songs in grouping match one album** SongKong may be able to group some songs to releases, however disabling this option and renaming files can break up folders if you have **Rename files based on metadata when matched** enabled

If you have a mixture of folders some already well organized and some not one approach is to work on certain folders first, and then change the options before processing others folders. Another approach is to run SongKong with the most stringent matching criteria first and a **Move matched folder** enabled so that all the folders that match that stringent criteria are moved out of the way. Then you can rematch the remaining folders using less stringent criteria.

How large is your collection?

SongKong imposes no limit on how many songs can be processed, but of course the more songs that you try and fix the longer it is going to take. We always recommend matching a small selection of files first so that you understand how SongKong works before diving in and fixing your whole collection. If you collection is really large it could be more manageable to process your collection in sections, the **Move matched folder** and **Move unmatched folder** options are useful for categorizing your songs and splitting between songs that were checked and failed to match and songs that have not been checked.

Do you use iTunes?

SongKong can inform iTunes of any changes made but if you use iTunes you should understand how some iTunes options can effect SongKong. Notably a default iTunes installation will make a copy of every files added to iTunes so if you are trying to match a pre-existing iTunes library you'll want to point SongKong at the iTunes copies of your files. When processing a larger collection it is often simpler and cleaner to fix your songs without enabling iTunes updating and then create a brand new iTunes library and upload your newly organized music in one go.

How do you want your folder structure organized?

SongKong can rename your files based on their metadata when matched to MusicBrainz and Discogs. In the **File naming** tab there is a list of existing rename masks you can use, alternatively you can create your own. You can rename your files using any metadata you wish but **it is strongly recommended** you use a mask that organizes songs so that songs by a particular artist and from a particular album are kept within their own folder because almost every music player and music tagger expects this. Also if a hierarchical folder structure is not used and too many files are stored in one folder disk access can become very slow

SongKong allows you to specify two masks, the **Rename mask** and the **Compilation rename mask**. Is is important to realize that not all compilations are Various Artist compilations, a single artist can also have compilation releases so this must be considered when choosing a mask.

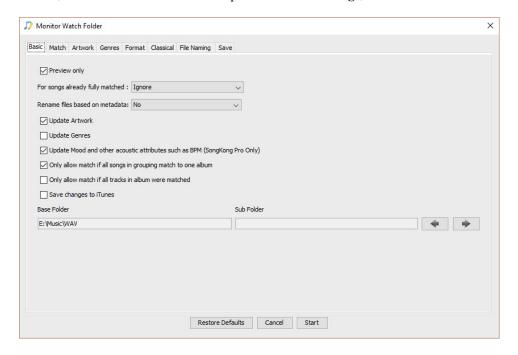
Both compilation and non-compilations releases can be multiple disc releases, the trend is now to have an additional sub folder for each disc if the release is a multiple disc release.

Monitor Watch Folder

Select a folder as a **Watch Folder**, then whenever a folder is added to the watch folder **SongKong** automatically starts processing songs within that folder, plus any sub folders it contains. This has many

uses, for example you can just add folders of new songs you have yet to organize into this folder and let SongKong organize them for you.

Watch Folder uses the same options as **Fix Songs**, and if the options are changed during a **Fix Songs** session, these will become the default options for **Watch Songs**, and vice versa.



Monitor Watch Folder does not react to individual music files being added to the watch folder, nor does it react to folders being added to sub folders of the watch folder. It is not a suitable way to monitor changes made with another Music Library such as iTunes. It does not process folders and files already in the folder when you start Monitor Watch Folder, it is designed for monitoring new additions to the folder.

Delete Duplicate Songs

SongKong can identify duplicate songs in your music collection, tidying up your song library and freeing up space on your computer or device.

First use the **Select** button to find the music files you want SongKong to process and click on the **Delete Duplicates** icon. In this window you can set up how SongKong identifies duplicates and what you want it to do with the duplicates it finds (delete them immediately or store in a duplicates folder). Click on **Start** and let SongKong begin searching your collection.

By default SongKong identifies duplicates if they have the **Same title and album name**, (**metadata only**). This default setting allows you to delete duplicates even if you haven't fixed your songs yet and also to use the **Delete Duplicates** tool within the trial version.

It is usually best to fix songs before you delete duplicates so that you get more accurate results. For example, if your music library contains inaccurate data with songs saved as *Track 1*, *Track 2* etc then under the default setting for finding duplicates (same title and album) songs may be identified as duplicates because they have the same title even though they could be completely different, however, if your music collection is reasonably well organized this is unlikely to be a problem.

SongKong can detect if you have fixed your songs already or not and will automatically flag up an alert before you proceed with the default option before fixing songs to be sure you want to proceed with that option.

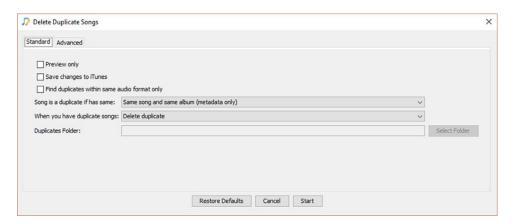
If you have fixed songs already and found MusicBrainz and Acoustic Id matches for your songs then you can achieve more accurate results and select from a range of criteria to identify duplicates to suit

your needs. You may also choose to use different criteria to identify duplicates within different parts of your music collection or to repeat the process with different criteria, depending on your needs.

Standard Options

This screen allows you to control how SongKong will find duplicate songs and what to do with them if it does find them.

For example, when SongKong has found duplicate songs in your collection you can decide whether to automatically delete them or to move them to a duplicate folder for review first.



Preview Only

The **Preview only** option allows you to try out SongKong and test the different criteria for identifying duplicate songs without making any modifications to your collection. In preview mode you will be able to see a full report of SongKong's activity without actually deleting files.

Preview only is always enabled in SongKong with a Trial License.

Save changes to iTunes

If enabled then any deleted files that are under iTunes control will be removed from the iTunes library

Find Duplicates within same audio format only

If enabled then searches can be restricted to be within a particular format. This makes it easy to keep multiple versions of the same file but with different formats whilst still finding actual duplicates.

Song is a duplicate if has same

You can specify what is meant by a duplicate, depending on what you want to achieve.

Whether you are interested in creating a jukebox of songs or preserving the integrity of albums the different options will help you. The options vary in their restrictiveness and of course you can apply different criteria to different parts of your music collection or use more than one option to hone your results.

Within SongKong you can set the duplicate criteria to be:

Same title and album (metadata only)

In this option a song is considered a duplicate if it contains the same information for the artist, song title and album in the metadata fields. This option is good if you want to be able to play complete albums because if a song appears on an original album and a compilation then no songs will be deleted.

This is the default setting. More accurate results can be achieved if you fix songs first and find duplicates based on their MusicBrainz Ids.

Same title (metadata only)

In this option a song is only considered a duplicate if it contains the same information for the artist and title in the metadata fields. This is most useful if your focus is on individual songs. More accurate results can be achieved if you fix songs first and find duplicates based on their MusicBrainz Ids.

Sounds the same only.

This option finds duplicate songs based purely on how the songs sound. This is most useful if your focus is on individual songs and allows you to find duplicates for songs that don't have a MusicBrainz match.

Same MusicBrainz song only.

This option finds duplicates if they have been identified as the same song in MusicBrainz. This is most useful if your focus is on individual songs. To use this option process your songs in **Fix Songs** first.

Same MusicBrainz song and sounds the same:

This option finds duplicate songs if they are the same song in MusicBrainz and if they sound the same. This is most useful if your focus is on individual songs more than albums and the acoustic matching provides an extra check that the songs really are the same.

Same MusicBrainz song and same album (any version)

This option is best if you prefer to play complete albums because if the same MusicBrainz song is found on an original album and a compilation album then no songs will be deleted, keeping your albums in tact.

Same MusicBrainz song and same album (any version) and sounds the same

This criteria is like the preceding option but with an added acoustic check to be really sure the song is the same.

Same MusicBrainz songs and same album (specific version e.g... same date/country of release)

This is a more restrictive criteria than same song and same album (any version) because it will only identify duplicates if the same song is found in exactly the same version of an album. If the same song is found in the UK and the US release of an album no song will be deleted.

Same MusicBrainz songs and same album (specific version e.g... same date/country of release) and sounds the same.

This is the strictest criteria for finding duplicates. It works in the same way as the previous option but has the added acoustic check to be extra sure that a song really is the same.

Read on for more detail about how each criteria works.

Same title and album (metadata only)

In this option a song is only considered a duplicate if it contains the same information for the artist, song title and album in the metadata fields.

This option can be used for songs that have not been fixed by SongKong because it only looks at standard metadata that is used by many applications rather than using MusicBrainz Ids.

This option is good if you want to be able to play complete albums because if a song appears on an original album and a compilation then no songs will be deleted. For example, if you have *With or Without You* by *U2* on both their **The Joshua Tree** and **The Best of 1980 -1990** albums, then no songs would be deleted because although the song is the same it is within different albums, thus leaving

the albums complete. However, if you have With or Without You on a UK and a US release of **The Joshua Tree**, then one of the songs would be deleted.

This option could be less reliable than other options because if your music library contains inaccurate data with songs saved as **Track 1**, **Track 2** etc then under this setting songs could be identified as duplicates because they have the same title even though they could be completely different. However, if your music collection is reasonably well organized this is unlikely to be a problem.

It is usually best to Fix Songs before you delete duplicates so that you get more accurate results by finding duplicates based on their MusicBrainz Id.

This is the default setting for the trial version of SongKong.

Same title (metadata only)

In this option a song is only considered a duplicate if it contains the same information for the artist and song title in the metadata fields.

This option can be used for songs that have not been fixed by SongKong because it only looks at standard metadata that is used by many applications rather than using MusicBrainz Ids.

This is useful if you are more interested in individual songs than albums, for example, if you want to create a **jukebox** of songs.

With this criteria if the same song appears on two completely different albums such as an original and a compilation, one of the songs will be deleted. For example if you have the song **With or Without You** by *U2* on both their **The Joshua Tree** and **The Best of 1980-1990** albums, then one of the songs would be deleted.

This option could be less reliable than other options because if your music library contains inaccurate data with songs saved as **Track 1**, **Track 2** etc then under this setting songs could be identified as duplicates because they have the same title even though they could be completely different. However, if your music collection is reasonably well organized this is unlikely to be a problem.

It is usually best to fix songs before you delete duplicates so that you get more accurate results by finding duplicates based on their MusicBrainz Id.

Sounds the same only

This option finds songs that are the same based purely on how they sound. It compares songs only by their acoustid, a representation of what they sound like.

This is useful if you are more interested in individual songs than albums, for example, if you want to create a **jukebox** of songs.

With this criteria if the same song appears on two completely different albums such as an original and a compilation, one of the songs will be deleted. For example if you have the song **With or Without You** by *U2* on both their **The Joshua Tree** and **The Best of 1980-1990** albums, then one of the songs would be deleted.

Fix your songs before you use this option so that SongKong can create acoustic Ids for each of your songs. Using this criteria to identify duplicates allows you to find duplicates for songs that don't have a MusicBrainz match.

Same MusicBrainz song only

This option finds duplicates if they are identified as the same song in MusicBrainz.

This is useful if you are more interested in individual songs than albums, for example, if you want to create a jukebox of songs.

So with this option if the same song appears on two completely different albums such as an original and a compilation, one of the songs will be deleted. For example if you have the song **With or Without**

You by U2 on both The Joshua Tree and U2 The Best of 1980-1990, then one of the songs would be deleted.

To use this option successfully, process your songs in **Fix Songs** first so your songs have been matched to MusicBrainz songs.

Same MusicBrainz song and sounds the same

In this option a song is identified as a duplicate if it is identified as the same song in MusicBrainz and if it sounds the same.

This is useful if you are more interested in individual songs than albums, for example, if you want to create a **jukebox** of songs.

With this criteria if the same song appears on two completely different albums such as an original and a compilation, one of the songs with be deleted. For example if you have the song **With or Without You** by *U2* on both their **The Joshua Tree** and **The Best of 1980-1990** albums, then one of the songs would be deleted.

To use this option successfully, process your songs in **Fix Songs** first so your songs have been matched to MusicBrainz songs and created acoustic Ids for your music.

In this option, matching the song acoustically as well, acts as an additional check that it really is the same version of the song.

Same MusicBrainz song and same album (any version)

In this option a song is only considered a duplicate if it is the same MusicBrainz song **and** it is within the same album (any version).

This option is good if you want to be able to play complete albums because if a song appears on an original album and a compilation then no songs will be deleted. For example, if you have **With or Without You** by **U2** on both their **The Joshua Tree** and **The Best of 1980 -1990** albums, then no songs would be deleted because although the song is the same it is within different albums, thus leaving the albums complete. However, if you have **With or Without You** on both a UK and a US release of **The Joshua Tree** then one of the song will be deleted.

To use this option successfully, process your songs in **Fix Songs** first so your songs have been matched to MusicBrainz songs.

Same MusicBrainz song and same album (any version) and sounds the same

In this option songs are identified as duplicates if they are the same MB song **and** they are on the same album **and** they sound identical.

This option is good if you want to be able to play complete albums because if a song appears on an original album and a compilation then no songs will be deleted. For example, if you have **With or Without You** by **U2** on both their **The Joshua Tree** and **The Best of 1980 -1990** albums, then no songs would be deleted because although the song is the same it is within different albums, thus leaving the albums complete. However, if you have **With or Without You** on both a UK and a US release of **The Joshua Tree** then one of the song will be deleted.

To use this option successfully, process your songs in **Fix Songs** first so your songs have been matched to MusicBrainz songs and created acoustic Ids for your music.

In this option, matching the song acoustically as well, acts as an additional check that it really is the same version of the song.

If you want to be even stricter, so that songs appearing on different versions of the same album are not considered the same (for example, a UK and US version of *U2* **The Joshua Tree**) then use **Same MusicBrainz song and specific album version** to identify duplicates.

Same MusicBrainz song and same album (specific version, e.g... same date/country of release)

This option finds duplicates if they are identified as the same song on MusicBrainz **and** they appear on the same version of an album.

This option is good if you want to be able to play complete albums.

With this criteria if the same song appears on two different versions of the same album, for example, if you have *U2s* With or Without You on a US and a UK release of The Joshua Tree, then no songs will be deleted. However, if you had With or Without You on two copies of the UK release of *The Joshua Tree*, then one song would be deleted.

To use this option successfully, process your songs in **Fix Songs** first so your songs have been matched to MusicBrainz songs.

This criteria is more restrictive than the Same MB song and same album (any version).

Same MusicBrainz song and same album (specific version, e.g... same date/country of release) and sounds the same

This is the strictest criteria for finding duplicates.

This option finds duplicates if they are identified as the same song on MusicBrainz **and** they appear on the same version of an album **and** if they have been identified as sounding identical.

This option is good if you want to be able to play complete albums.

With this criteria if the same song appears on two different versions of the same album, for example, if you have U2s' **With or Without You** on a US and a UK release of their **The Joshua Tree** album, then no songs will be deleted. However, if you had **With or Without You** on two copies of the UK release of **The Joshua Tree**, then one song would be deleted.

To use this option successfully, process your songs in **Fix Songs** first so your songs have been matched to MusicBrainz songs and created acoustic Ids for your music.

In this option, matching the song acoustically as well, acts as an additional check that it really is the same version of the song.

When you have duplicate songs

When duplicate songs are found one is kept and the remainder are either deleted or moved to the specified **Duplicates folder**.

Duplicates folder

This is the folder where the duplicate songs will be moved to if you select to move duplicates instead of deleting them. By creating a **duplicates folder** you build in a safeguard that permits you to keep your duplicate files for review before final deletion or alternatively to restore them to your music collection if you change your mind or wish to adjust your criteria for identifying duplicates.

Advanced Options

The **Advanced Options** allow you to control how SongKong decides which songs to delete and which to keep once it has identified duplicates in your collection.

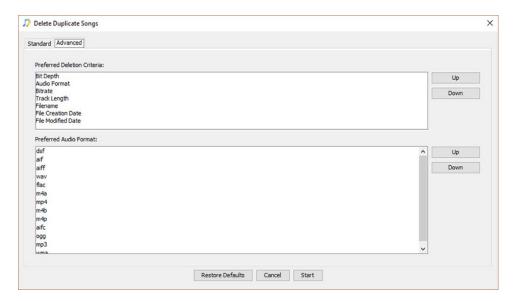
Why does this matter? You may have a preferred audio format. You may prefer *lossless* files or files that are for all intents and purposes the same as the original CD track because when they were ripped to

the hard drive no data was lost. Alternatively, you may opt to keep *lossy* files or compressed versions of the tracks because they don't take up so much space on your hard drive, iPod, DropBox etc. The Advanced Options allow you to decide which audio format you would like SongKong to keep when duplicates are found.

By default the Advanced Options uses **Audio Format** to decide which files to delete and which to keep and 'lossless' files are set as the files to keep. You can, however, change the preferred audio format to suit your needs.

As well as **Audio format** SongKong allows you to delete duplicates by a range of criteria including **Bitrate, Track Length, File name and File Creation Date.**

You can order the priority of this criteria so that the files SongKong keeps once duplicates have been found are the versions you really want.



Preferred Deletion Criteria

When duplicates are found, SongKong decides upon the song to be kept and the songs to be deleted based on the order of this criteria. The first item in the list is used to compare songs, and only if all the songs for that key are found to have the same value for the criteria does additional criteria get used in the order they are listed. To change the order of the criteria click on the criteria you wish to reorder and use the up and down keys to move into position.

Audio Format

Keeps the file format that comes earlier in the **Preferred Audio Format** list. By default SongKong keeps *FLAC* or lossless files, wherever possible. You may prefer **lossy** files if you want to save space on your music player. To change the order of the **Preferred Audio Format** select the audio format you wish to reorder and use the up and down keys to move into position.

Bitrate

Bitrate describes the number of **bits** or amount of data that are processed over a certain amount of time. In audio this usually means kilobits. For example, the music you buy on iTunes is 256 kilobits per second, meaning there are 256 kilobits of data in every second of song. The higher the bitrate of a track, the more space it will take up on your computer. Generally, an audio CD will take up quite a bit of space which is why it has become common practice to compress those files.

If bitrate is your preferred deletion criteria then SongKong will keeps the song with the highest bitrate. It doesn't usually make sense to compare the bitrate of different audio formats, so this criteria should always come below the audio format criteria.

Track Length

When your preferred deletion criteria is **Track Length** SongKong keeps the longest song and assumes that the shorter version of the same song may be incorrectly clipped.

File name

If your preferred deletion criteria is **File name** SongKong keeps the file name that looks like the original file by looking for words such as **Copy** in the file name.

File Creation Date

This option keeps the file with the earliest creation date.

File Modified Date

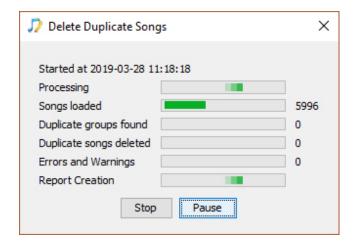
This option keeps the file with the earliest modification date.

Preferred Audio Format

When the preferred audio format is being used this list defines the order of the preferred audio formats to use, by default lossless formats are preferred. The order of preference can be adjusted by using the up and down keys so if you prefer to keep lossy files over lossless you can adjust the order.

Progress Bar

Once you have selected how you want SongKong to find duplicates and what you want it to do with them click **Start.** You will automatically be presented with a progress bar screen whilst SongKong processes your music.



Songs loaded

The first progress bar tells you how many songs have been loaded into SongKong.

Duplicates groups found

This progress bar describes how many duplicates how been found. This number describes the number of groups of duplicate files found that match your delete duplicate criteria. For example, if you set your **Song is the same if** criteria to be **Same MusicBrainz song and same specific album** and in your collection you have the song **With or Without You** by **U2** on three copies of the UK release of **The Joshua Tree**, then this group of three songs will be listed as one group of duplicates. Each **duplicate group** is listed as one duplicate found.

Duplicates songs deleted

This progress bar tells you how many duplicate songs have been deleted. This number will always be equal to or higher than the number of duplicates found. This is because for every group of duplicate songs found that match your delete duplicate criteria at least one will be deleted, depending upon the size of the group.

For example, if you set your **Song is the same if** criteria to be **Same MusicBrainz song and same specific album** and in your collection you have the song **With or Without You** by **U2** on two copies of the UK release of **The Joshua Tree** then this will be listed as one duplicate group found and one duplicate song deleted (one of the duplicates will be kept).

However, if using the same criteria, SongKong finds three copies of **With or Without You** by *U2* on the UK release of **The Joshua Tree** this will be listed as one duplicate group found and two duplicates songs deleted (one of the duplicates will be kept).

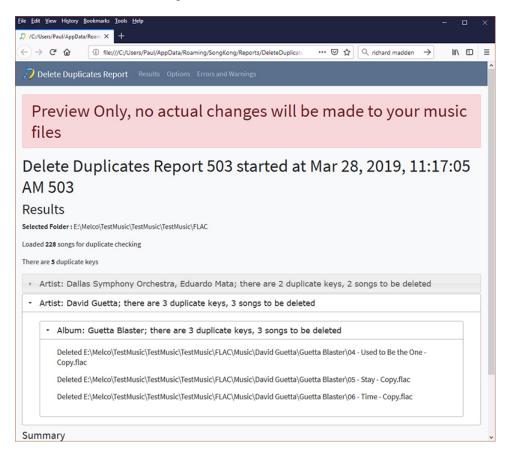
Errors found

The last progress bar lists errors found.

You can pause or stop the process at anytime. Once the process is completed you will be directed to the delete duplicates report.

Delete Duplicates Report

The report shows the options used for the Delete Duplicates task together with details of all the duplicates found and the files deleted. The report identifies which songs will be kept and which will be deleted or moved to the Duplicates Folder.



Undo Fixes

The first time you use SongKong with a song the songs details are recorded in the songs database. This means that at a later date you can use **Undo Fixes** to revert your song details back to what they were

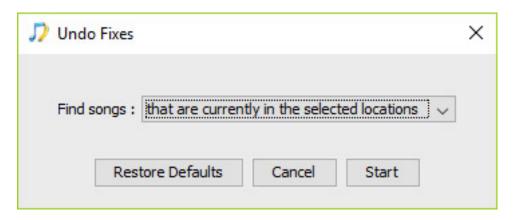
before they had been modified by SongKong, it even renames files and moves them back to where they originally were. This gives you the confidence to let SongKong do its thing. If after completing a **Fix Songs** task you find that you are happy with most of the results except for a couple of sub folders please realize you can just select those sub folders and undo changes to them, you do not need to undo changes to all folders, you can even undo individual files or the contents of playlists!

Note that **Undo Fixes** is for undoing changes made by **Fix Songs**, it is not for recovering files that have been deleted by **Delete Duplicate Songs**. When using Delete Duplicate Songs you can ensure files are recoverable by using a **Duplicates Folder** instead of deleting them outright, or on some systems even if you do not use this option they may be moved to the Recycle Bin.

When you undo changes SongKong will return the songs metadata within the selected folder to how it was before **any** fix songs tasks were applied to the songs, if you have run Fix Songs on a file more than once you cannot Undo made just by the last **Fix Songs** run. If you recreate the SongKong database either by running the **Empty Database** task or updating SongKong to as newer version you will no longer be able to undo changes made up to this point.

Options

Undo Fixes options



By default SongKong is looking for the files *that are currently in the selected locations* when undoing changes but you can modify this option to change it to files *that were originally in the selected locations*. This can be especially useful if you are looking to undo changes to files that were originally in one folder but have now been moved to multiple folders by SongKong.

Edit Songs

It is not possible for SongKong to automatically identify songs that are not yet in the Albunack database. When they are matched this does not necessarily mean that all the metadata can be added, for example it may not be possible to find the artwork or determine the movements for a Classical release. In cases such as these **Edit Songs** allows you to edit the metadata for a selected folder.

Whilst there are many tagger editors already available for manual tag editing there are some major advantages to using SongKong:

- If you are already using SongKongs remote matching then you can use a single application for all
 your music metadata tasks, and manual edit understands the same fields as automatic edit so there
 are no comparability problems.
- Manual Editing is available in remote mode (as well as desktop mode) so you can edit your metadata
 remotely via a web-browser. This is very useful if you have SongKong running on a less accessible
 machine such as a linux server.

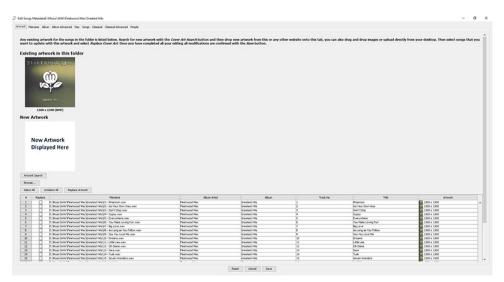
- After each manual edit session SongKong creates a report so you have a record of exactly what has been changed.
- SongKong saves all changes to a database so that you can use **Undo Fixes** in exactly the same way as you can do for automatic edits.

When you start **Edit Songs** SongKong loads the contents of the selected folder, if the selected folder does not contain any songs then it will search for the first subfolder that does contain songs and use that instead. SongKong will only load a single folder of songs in one Edit Songs session. If you want to do extensive editing you may want to consider **Jaikoz Music Tagger**

SongKong presents your existing music metadata in a series of tabs grouped by different metadata, each containing one a table with one line per song. The first tab is the **Artwork** tab, and this contains some additional features to help with adding artwork. It is expected that usually one folder will represent a single album but we have designed **Edit Songs** such that it will work when a folder represents songs from different albums as well.

Artwork tab

At the top of **Artwork** tab it shows all the existing artwork for songs in this folder, usually you would expect there to be either one or zero pieces of artwork. The **New Artwork** area will be where newly added artwork is displayed, at the bottom are listed your songs in this folder with some of their basic metadata to help identification.



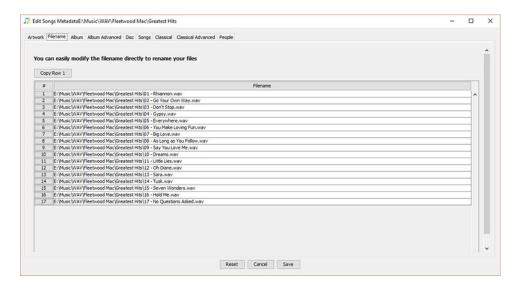
You can add new artwork as follows:

- Use Artwork Search to open a Google image search for the album, then drag artwork from here.
- · Alternatively use other search in your web browser and drag the artwork
- Alternatively drag files from your computer or use the **Browse** button to select a file on your computer..
- The artwork will then display in the New Artwork area together with its size
- Select the tick box in the **Replace** column for the songs that you want to replace with this artwork, you can use **Select All** to select all songs
- Then use **Replace Artwork** to replace the artwork for the selected songs, the **Artwork** column will be updated.
- At this point nothing has actually be saved, this will not occur until you have finished making edits on required tabs and then select the **Save** button.

• If you want to add different artwork for different songs, simply repeat the process selecting different songs in the **Replace** column each time.

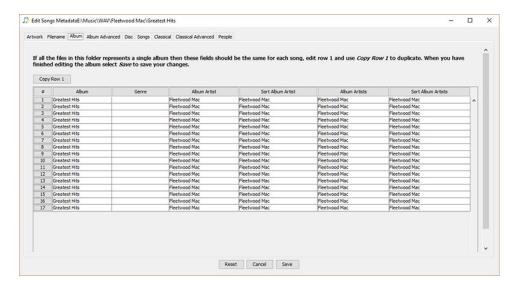
Filename tab

The **Filename** tab can be used to edit the actual file path and name of each song.



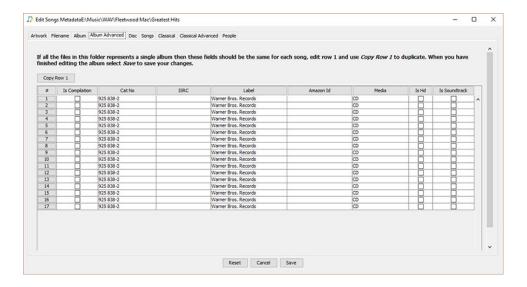
Album tab

The **Album** tab can be used to edit the basic album data for the songs. If the folder represents a single album then the metadata should be the same for all songs, in this case you can just enter data into the first row and then use **Copy All Row 1** to copy this information to the other songs. You can right click on any column header and use **Copy Row 1** to just copy the contents of this field to all other rows.



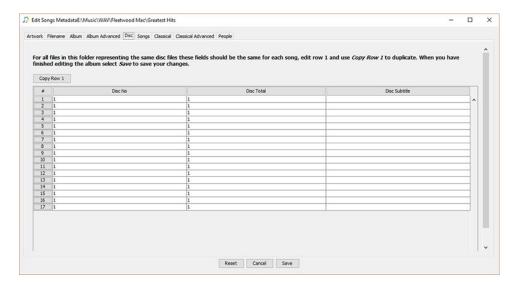
Album Advanced tab

The **Album Advanced** tab can be used to edit the more advanced album data for the songs. If the folder represents a single album then the metadata should be the same for all songs, in this case you can just enter data into the first row and then use **Copy All Row 1** to copy this information to the other songs.



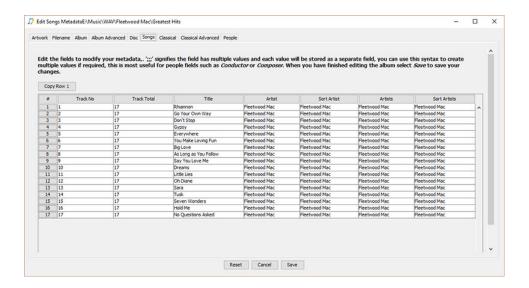
Discs tab

The **Discs** tab can be used to edit the more advanced album data for the songs. If the folder represents a single disc of a single album then the metadata should be the same for all songs, in this case you can just enter data into the first row and then use **Copy All Row 1** to copy this information to the other songs.



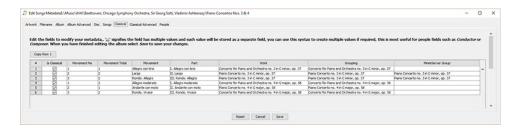
Songs tab

The **Songs** tab can be used to edit the basic song metadata. You can right click on any column header and use **Copy Row 1** to just copy the contents of this field to all other rows.



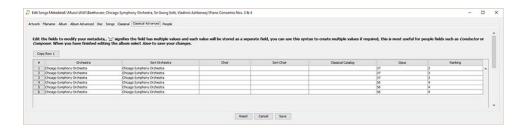
Classical tab

The Classical tab can be used to edit basic Classical metadata



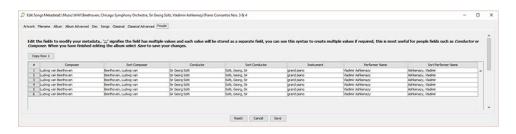
Classical Advanced tab

The Classical Advanced tab can be used to edit basic Classical metadata



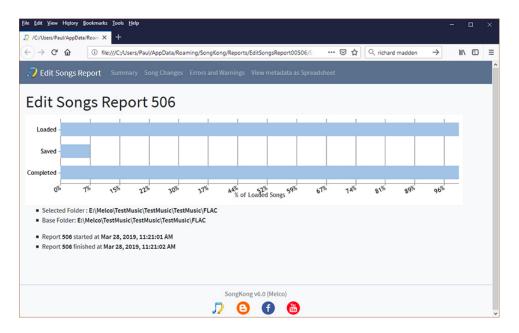
People tab

The **People** tab can be used to edit basic people and sort metadata



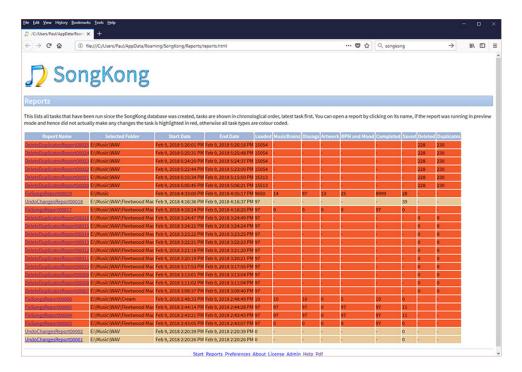
Save Changes and Report creation

Only when you select **Save** does SongKong actually begin saving your files, once this has completed it will create and display a report showing your modifications.



Reports

From the *Reports* menu you can open a list of all task run since the current SongKong database was last created. This opens a web-page showing tasks in reverse chronological order, latest task first with a summary of the results. The tasks are colour coded with each task a different colour, unless run in preview mode, tasks run in preview mode are coloured red.



Admin

Empty Database

The SongKong database contains:

- Details of every file loaded into SongKong
- Details of changes made to songs by SongKong
- Cached copies of releases and artists downloaded from MusicBrainz and Discogs

From time to time you may want to clear out the database, reasons could be:

- · To reclaim hard drive space
- To force SongKong to retrieve new versions of data from MusicBrainz and Discogs
- To delete changes history, so future **Undo Fixes** will only undo up to this point.
- Support has requested you do this to fix a problem with the database

About

Shows basic information about the version of SongKong installed and your license details

Check for Updates

Manually check for a later version of SongKong, SongKong automatically checks for a later version every time you start it.

Create Support Files

If you have a problem with SongKong use this option to automatically send support files and your latest reports to JThink. This file contains the latest reports, logs and user preferences, and this makes its much easier to resolve issues.

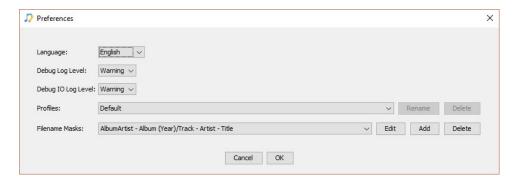
Empty Log Files

Log files can be purged reducing the size of support files sent using **Create Support Files**.

Delete Reports

Every time you use SongKong to fix songs or delete duplicates a report is created. Over time these can take up a lot of disk space so you can use this to delete your reports when you no longer have need for them.

Preferences



Preferences Options

Language

This defaults to your computers locale, but you can select from over 15 languages that SongKong has been translated into. You'll need to restart SongKong after changing the language for all text to display in the new language.

Table 5.

Supported Languages

Danish

Dutch

English

Finnish

French

German

Greek

Hindi

Italian

Norwegian

Polish

Portuguese

Romanian

Russian

Spanish

Swedish

Debug Log Level

SongKong creates a log file recording information about what it is doing, how much information is recorded depends on the value of this option. If you are having a problem with SongKong then support may request that you increase the log level to aid in resolving the problem.

Debug IO Log Level

SongKong also records information about what is transferred between your songs and SongKong when opening and saving changes to your song files, how much information is recorded depends on the

value of this option. If you are having a problem with SongKong then support may request that you increase the log level to aid in resolving the problem.

Profiles

Profiles allow you to store different configurations for achieving different tasks.

Within Preferences you can delete or rename any profiles except the *Default* profile and the progile selected as the current profile on the main screen.

Filename Masks

Filename masks are used to rename your files based upon the metadata in your music files. From *Preferences* you can create new masks, edit existing masks and delete masks, the list of masks is shared by all profiles. Within *Fix Songs* on the *Filenaming* tab you can then specify a *Filename Mask* to use as a *Rename Mask* and *Filename Mask* to use as a *Compilation Rename Mask*.

The **File name masks** drop-down list all the masks currently available for renaming songs based on their metadata.

You can modify an existing mask by selecting a mask from the drop-down and selecting the **Edit** button.

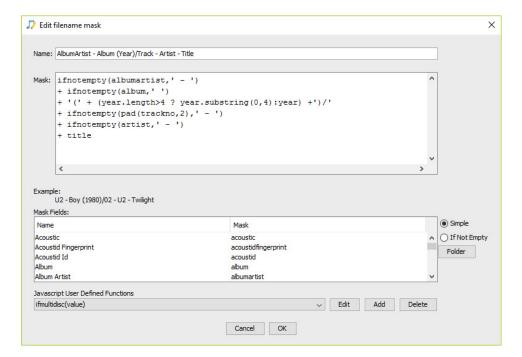
You can delete an existing mask by selecting a mask from the drop-down and selecting the **Delete** button.

You can create a new mask by selecting the **Add** button

Add/Edit Mask

A rename mask consists of a **name** and the actual **mask** itself. The **name** is displayed in the drop down and can be anything you like. The **mask** uses the full **JavaScript Expression** language and this makes it incredibly powerful.

The Mask Field list shows all the metadata field that can be used in the mask



When you want to create or edit a mask decide how you want the file path to look with a given set of metadata, remembering that the mask does not replace the **base folder**, only the **sub folder** and **file name**.

i.e. for the file C:\\Music\U2\The Joshua Tree\With or Without You.mp3 the correct split should be:

• Base Folder : C:\Music

• Sub Folder: U2\The Joshua Tree

• File name: With or Without You.mp3

These split between base folder and sub folder is decided when you select a folder to fix, if SongKong gets it wrong it can be modified on the **Basic** tab before the fixing process is started.

Use the Mask Fields to get the correct metadata.

Use '/' to indicate a folder separator. You can pass these fields to JavaScript functions such as the **ifnotempty** function, functions take an input and return an output.

The '+' character is used to concatenate the two results, for example 'Dog' + 'Fish' gives 'DogFish'

It is tedious to repeat the same JavaScript in multiple places so you can use any of the predefined JavaScript functions from the **.JavaScript User Defined Functions** list.

You can also create new functions and edit existing ones.

addCompilation Function

The **addCompilation** function outputs a subfolder called **Compilation** if the song is a compilation, this provides an easy way to separate compilations from non-compilations

addGreatestHits Function

The **addGreatestHits** function outputs a subfolder called **GreatestHits** if the song is a compilation, this provides an easy way to separate greatest hits releases from non greatest hits

addHD Function

The **addHD** function outputs a subfolder called **HD** if the song is a High Definition Audio, this provides an easy way to separate HD from non-HD

ifempty Function

The **ifnotempty** function takes two parameters, the first is the metadata field, the second is text to put after the field if the metadata for a particular song is not empty, if it is empty then nothing is output.

This is useful to prevent outputting values intended to separate metadata when we don't actually have the metadata for a particular song.

ifempty2 Function

The **ifnotempty2** function takes three parameters, the first is the metadata field, the second is an alternative metadata field to use if the first metadata field is empty, the third is text to put after the field if the either first or second metadata fields are not empty for a particular song, if both are empty then nothing is output.

This function is useful when you have alternative sources that can be used if the primary source is empty, such as **Album Artist** and **Artist**.

ifempty3 Function

The **ifnotempty3** function takes four parameters, the first is the metadata field, the second is an alternative metadata field to use if the first metadata field is empty, the third is an alternative if the second metadata field is empty, the fourth is text to put after the field if any of the metadata fields are not empty for a particular song, if all are empty then nothing is output.

ifmultidisc Function

The **ifmultidisc** function takes a value to output if the song belongs to a multi-disc album, if it doesn't then nothing is output.

padnumber Function

The **padnumber** function takes two parameters, the first is the number, the second is the desired length. For example if the first parameter is '1' and the second parameter is 2 it will output 01, if the second parameter was three it would output 001.

substring Function

The **substring** function takes two parameters, the first is the text, the second is the desired length. For example if the first parameter is **frederick** and the second parameter is **4** it will output **fred**. Unlike the standard substring function provided by JavaScript this one will not error if the required length is longer than the text

Add/Edit JavaScript Function

You can modify or create a single JavaScript function using the standard **JavaScript Expression** syntax.

```
Function: function ifmultidisc(value) {
    if (disctotal>1) {
        return value;
    }
    else    {
        return "";
        Cancel OK
```

Remote Mode

Remote Mode allows you to control SongKong from a regular web browser, this can be the same computer but can also be on another computer, tablet device or mobile phone, that is why we describe it as **Remote Mode**

This means having installed SongKong on your computer you can then use it from another location in your home, for example your computer may in your home office but you can control from your phone in your lounge. But it also means you can install and use SongKong on a computer that does not have a **Graphical User Interface** such as a Linux server, and unlike the command line tool you have full access to all user options and administrative tasks such as license installation. The **Remote Mode** means you can install SongKong on the same machine as your music resides on so that the actual file updating does not have to be done over the network meaning much faster matching, especially with large lossless files.

The *Remote Mode* user interface has been designed to look as much like the desktop mode as possible, whilst being adaptable to the different screen sizes of computers and mobile devices.

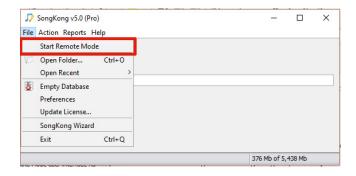
Please note *Remote Mode* is a way to run SongKong remotely, it is not a typical **Server Mode**. A typical server mode would mean you installed SongKong on one machine, and then you could connect to it via different client computers and could fix the files on the client computers, but this would make no sense as it would require each client to upload their files to the remote server to fix them. If you have multiple computers or servers we recommend you install SongKong on each server, a standard SongKong license allows you to install on up to three computers concurrently.

Remote Mode can be invoked either by starting SongKong from the command line with the **-r** option or by starting in regular desktop mode and selecting **Start Remote Mode** from the **File** menu.

The **Fix Songs** and **Delete Duplicates** tasks require a **Pro**, **Commercial** or **Melco** license to run from Remote Mode.

Starting Remote Mode from Desktop

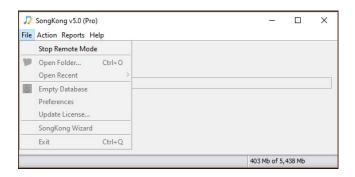
Simply start SongKong as usual, then select **Start Remote Mode** from the **File** menu. This will immediately switch SongKong to remote mode, all other menu and tasks within the desktop will be disabled and SongKong will open the SongKong remote interface in your browser.



For the local machine that is actually running SongKong the URL will always be http://localhost:4567

To access via another computer or mobile device use http://computername:4567 or http://computern

After starting **Remote Mode**, the **Start Remote Mode** option in the **File** menu becomes **Stop Remote Mode**, simply select this option to stop remote mode and return to the regular desktop mode.



Starting Remote Mode from command line

The location and name of the command line is operating system dependent as described below:

Windows 64bit

- Search for Command Prompt in Windows Taskbar
- Go to installation folder, e.g. cd "C:\Program Files\Jthink\SongKong"
- Run songkongremote64.bat

Windows 32bit

- Search for Command Prompt in Windows Taskbar
- Go to installation folder, e.g. cd "C:\Program Files (x86)\Jthink\SongKong"
- Run songkongremote.bat

MacOS

- In Finder select Applications: Utilities and select Terminal
- In Terminal navigate to SongKong's bin folder e.g. cd /Applications/SongKong.app/Contents/bin
- Run ./songkongremote.sh

Linux

- cd \$HOME/songkong
- Run ./songkongremote.sh

Remote Mode Browser Interface

The Browser interface is very similar to the Desktop interface. Because you are connecting to the computer remotely the folder tree displayed shows the folders that are on the remote machine not on the local machine. If the remote machine is MacOS or Linux based then the folder tree will be of the form /folder/subfolder. If it is Windows based the folder tree will be of the form C:\foldername \foldername for the local drive. Any remote drives on the remote machine will also be visible

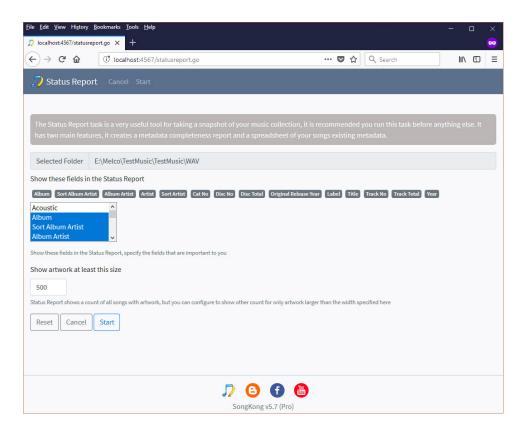
Remote Mode Limitations

There are currently a few limitations of the Remote mode compare to the Desktop mode

- Can only select a single folder rather than multiple folders
- Cannot be used with iTunes to update iTunes automatically because requires iTunes to actually be running on the server

Status Report

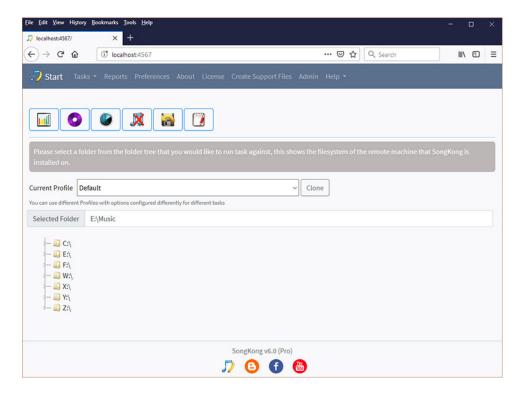
Here we show the options for the Status Report Options task



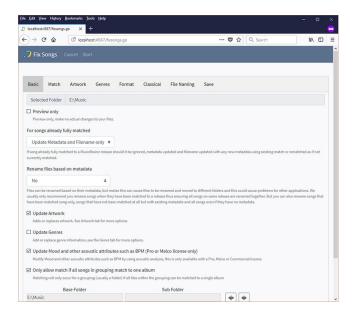
Fix Songs

Here we show the screen flow for the Fix Songs task

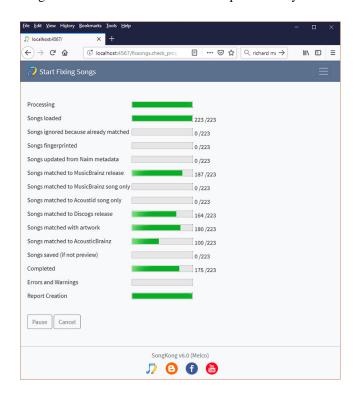
Select the folder you would like to fix from the remote machines folder tree, and select the **Fix Songs** task



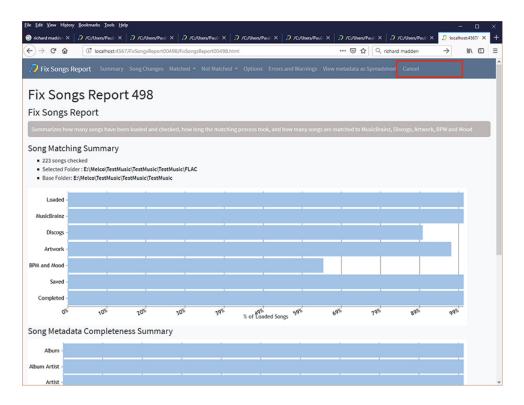
Review the Fix Songs options and then select Start



Progress of the sub task is shown and updated every 5 seconds



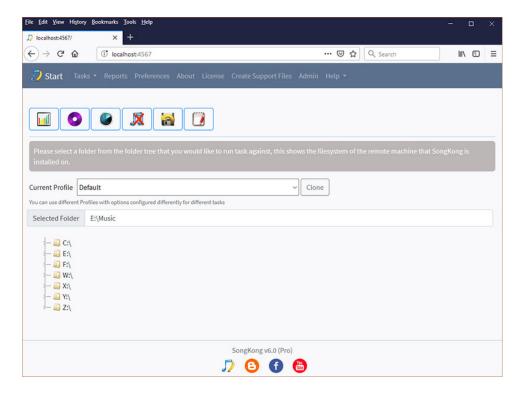
Once the task has completed (or been cancelled) the report is created and displayed. In **Remote Mode** you can get back to the start page from a report by selecting the *Return to Start* link



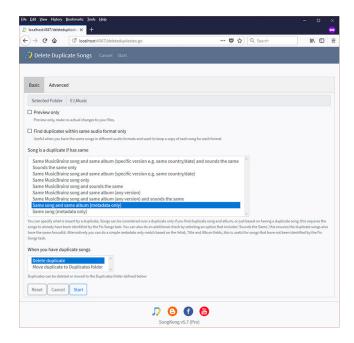
Delete Duplicates

Here we show the screen flow for the Delete Duplicates task

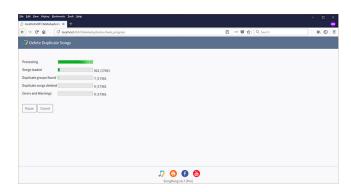
Select the folder you would like to fix from the remote machines folder tree, and select the **Delete Duplicates** task



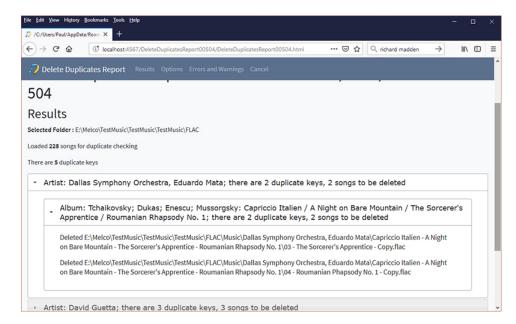
Review the **Delete Duplicates** options and then select **Start**



Progress of the sub task is shown and updated every 5 seconds



Once the task has completed (or been cancelled) the report is created and displayed. In **Remote Mode** you can get back to the start page from a report by selecting the *Return to Start* link



Edit Songs

Songs can be manually edited with the Edit Songs task.

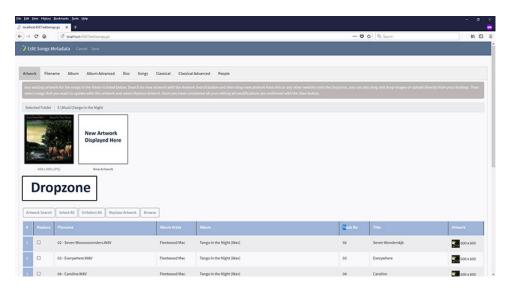
When you start **Edit Songs** SongKong loads the contents of the selected folder, if the selected folder does not contain any songs then it will search for the first subfolder that does contain songs and use that instead. SongKong will only load a single folder of songs in one Edit Songs session. If you want to do extensive editing you may want to consider **Jaikoz Music Tagger**

SongKong presents your existing music metadata in a series of tabs grouped by different metadata., each containing one a table with one line per song. The first tab is the **Artwork** tab, and this contains some additional features to help with adding artwork. It is expected that usually one folder will represent a single album but we have designed **Edit Songs** such that it will work when a folder represents songs from different albums as well.

Only when you select **Save** does SongKong actually begin saving your files, once this has completed it will create and display a report showing your modifications.

Artwork Tab

At the top of **Artwork** tab it shows all the existing artwork for songs in this folder, usually you would expect there to be either one or zero pieces of artwork. The **New Artwork** area will be where newly added artwork is displayed, thee **Dropzone** below is where new artwork can be dragged to, and at the bottom are listed your songs in this folder with some of their basic metadata to help identification.



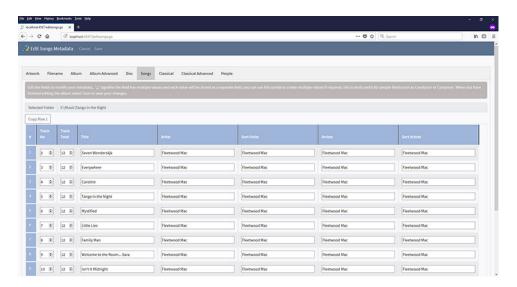
You can add new artwork as follows:

- Use **Artwork Search** to open a **Google Image search** for the album, then drag artwork from here onto the **Dropzone**
- Alternatively use another search in your web browser and drag artwork from here onto the **Dropzone**
- Alternatively drag files from your computer to the **Dropzone** or use the **Browse** button to select a file on your computer..
- The artwork will then display in the **New Artwork** area together with its size
- Select the tick box in the **Replace** column for the songs that you want to replace with this artwork, you can use **Select All** to select all songs
- Then use **Replace Artwork** to replace the artwork for the selected songs, the **Artwork** column will be updated.

- At this point nothing has actually be saved, this will not occur until you have finished making edits on required tabs and then select the **Save** button.
- If you want to add different artwork for different songs, simply repeat the process selecting different songs in the **Replace** column each time.

Other Edit Tabs

Metadata is grouped into logical tabs and can be edited like a spreadsheet.

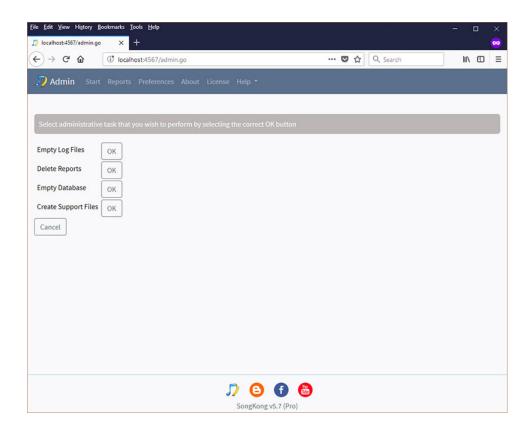


Admin

All Administrative tasks can be performed in Remote mode

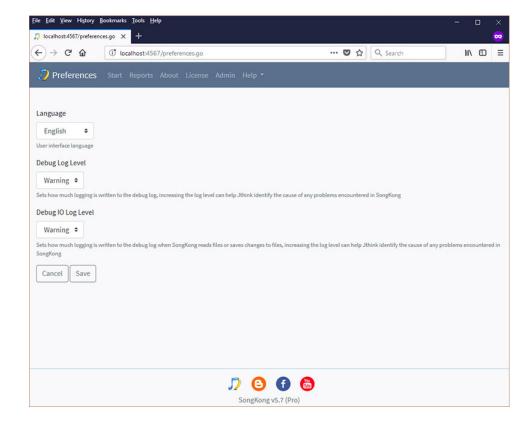
Admin

Selecting the **Admin** link at the bottom of the page takes you to the page below, and from here you can run **Empty Log Files**, **Delete Reports**, **Empty Database** and **Create Support Files**



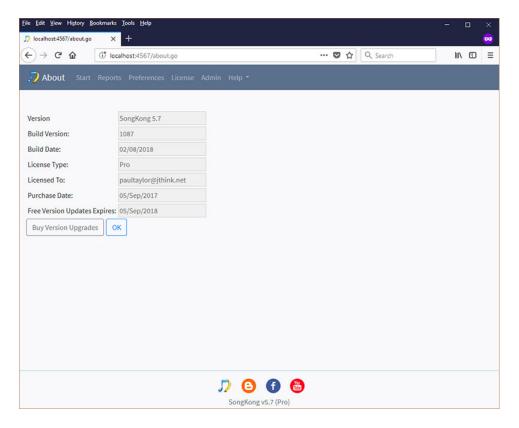
Preferences

And Preferences are available via the Preferences link



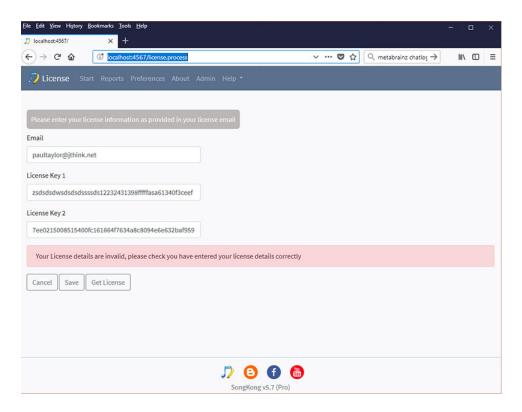
About

The **About** link shows details of your SongKong version, and license version. From here you can buy version upgrades, this allows you to continue getting the latest versions of SongKong for a nominal cost.



License

The License link lets you enter or update your license key



Command Line

Command line Options

SongKong is usually started as a **desktop** application but can also be run as a **command line** application by starting it with an option and a folder, options are as follows:

Run Status Report against folder

SongKong -s folder

Fix songs in folder

SongKong -m folder

Watch folder for changes

SongKong -w folder

Delete duplicates in folder

SongKong -d folder

Undo Fixes in folder

SongKong -u folder

Run in Remote mode

SongKong -r

Starting command line

The location and name of the command line is operating system dependent as described below:

Windows 64bit

- Search for Command Prompt in Windows Taskbar
- Go to installation folder, e.g. cd "C:\Program Files\Jthink\SongKong"
- Run SongKong64.bat with required option

Windows 32bit

- Search for Command Prompt in Windows Taskbar
- Go to installation folder, e.g. cd "C:\Program Files (x86)\Jthink\SongKong"
- Run SongKong.bat with required option

MacOS

- In Finder select Applications: Utilities and select Terminal
- In Terminal navigate to SongKong's bin folder e.g. cd /Applications/SongKong.app/Contents/ bin
- Run ./songkong.sh with required option

Linux

- cd \$HOME/songkong
- Run ./songkong.sh with required option

Manually Editing Options or License

To install the license or modify options you can either use the desktop or remote modes or manually edit the **songkong.properties** and **license.properties** files.

Opening songkong.properties file for Editing

The location of the both files is operating system dependent as described below:

Windows

- In **Windows Explorer** go to **C:\Users\username\AppData\Roaming\SongKong** (where *username* is your Windows username)
- Double click on songkong.properties file, to Edit

MacOS

- From Finder, hold down Option Button and select Go menu
- Select Library from the list
- Go to Preferences
- Double click on songkong.properties file, to Edit

Linux

- CD \$HOME/.songkong
- vi songkong.preferences to edit

Manually installing the license

The license is stored in the license.properties file, Simply replace the trial license with the three lines from your email to end of the file, such as

```
licenseEmail=username@userhosting.com
licenseKey1=10302c0214029c6570f60ae6e0d0350d45f0544b18d2071
licensekey2=d83021462f10cc0ccle2c0214029c9885a79b5face43f53
```

Manually editing preferences and options

Most preferences and options can be configured by adding/modifying them songkong.properties, they are stored as name value pairs

e.g.. configuring

preview=false

would disable **Preview Only** on the **Basic** tab, setting it to **true** would enable it. The vanilla songkong.properties file does not contain all the options because the defaults are stored in the application itself, so options are only added to songkong.properties when they are changed by the user. Ask on the forum http://www.jthink.net/jaikozforum/forums/list.page if you need help with configuring a particular options manually.

The **genrelist.txt** file can be used for configuring genre mappings, **classical_people.txt**, **classical_composers.txt**, **classical_conductors.txt** and **not_classical_release.txt** can be configured to fine tune classical music identification.

Field Mapping

The table shows how SongKong fields are mapped to the underlying field for the different song formats supported by SongKong.

ID3 Format

The ID3 metadata format is used by MP3, AIFF, WAV and DSF file formats.

Table 6.

Field name	ID3v23	ID3v24
AcoustId Fingerprint	TXXX:Acoustid Fingerprint	TXXX:Acoustid Fingerprint
AcoustId Id	TXXX:Acoustid Id	TXXX:Acoustid Id
Album	TALB	TALB
Album Artist	TPE2	TPE2
Album Artist Sort	TSO2	TSO2
Album Artists	TXXX:ALBUM_ARTISTS	TXXX:ALBUM_ARTISTS
Album Artists Sort	TXXX:ALBUM_ARTISTS_SORT	TXXX:ALBUM_ARTISTS_SORT
Album Sort	TSOA	TSOA
Arranger	TIPL:arranger	TIPL:arranger
Arranger Sort	TXXX:ARRANGER_SORT	TXXX:ARRANGER_SORT
Artist	TPE1	TPE1

Field name	ID3v23	ID3v24
Artist Sort	TSOP	TSOP
Artists	TXXX:Artists	TXXX:Artists
Artists Sort	TXXX:ARTISTS_SORT	TXXX:ARTISTS_SORT
ASIN	TXXX:ASIN	TXXX:ASIN
Bar-code	TXXX:BARCODE	TXXX:BARCODE
BPM	TBPM	TBPM
Catalog Number	TXXX:CATALOGNUMBER	TXXX:CATALOGNUMBER
Comment	COMM:description	COMM:description
Choir	TXXX:CHOR	TXXX:CHOIR
Choir Sort	TXXX:CHOIR_SORT	TXXX:CHOIR_SORT
Classical Catalog	TXXX:CLASSICAL_CATALOG	TXXX:CLASSICAL_CATALOG
Classical Nickname	TXXX:CLASSICAL_NICKNAME	TXXX:CLASSICAL_NICKNAME
Composer	TCOM	TCOM
Composer Sort	TSOC	TSOC
Conductor	TPE3	TPE3
Conductor Sort	TXXX:CONDUCTOR_SORT	TXXX:CONDUCTOR_SORT
Copyright	TCOP	TCOP
Country	TXXX:Country	TXXX:Country
Cover Art	APIC	APIC
Date	TYER+TDAT	TDRC
Disc Number	TPOS	TPOS
Disc Subtitle	TSST	TSST
Discogs Artist Site URL	WXXX:DISCOGS_ARTIST	WXXX:DISCOGS_ARTIST
Discogs Release Site URL	WXXX:DISCOGS_RELEASE	WXXX:DISCOGS_RELEASE
DJ Mixer	TIPL:DJ-mix	TIPL:DJ-mix
Encoded By	TENC	TENC
Engineer	TIPL:engineer	TIPL:engineer
Ensemble	TXXX:ENSEMBLE	TXXX:ENSEMBLE
Ensemble Sort	TXXX:ENSEMBLE_SORT	TXXX:ENSEMBLE_SORT
Genre	TCON	TCON
Grouping	TIT1	TIT1
Instrument	TXXX:INSTRUMENT	TXXX:INSTRUMENT
ISRC	TSRC	TSRC
Is Classical	TXXX:IS_CLASSICAL	TXXX:IS_CLASSICAL
Is Compilation	TCMP	TCMP
Is Greatest Hits	TXXX:IS_GREATEST_HITS	TXXX:IS_GREATEST_HITS
Is Soundtrack	TXXX:IS_SOUNDTRACK	TXXX:IS_SOUNDTRACK
Key	TKEY	TKEY
T .11	TDLID	TOUD

TPUB TLAN

TPUB

TLAN

Label

Language

Field name	ID3v23	ID3v24
Lyricist	TEXT	TEXT
Media	TMED	TMED
Mixer	TIPL:mix	TIPL:mix
Mood	TXXX:Mood	TMOO
Mood Acoustic	TXXX:MOOD_ACOUSTIC	TXXX:MOOD_ACOUSTIC
Mood Aggressive	TXXX:MOOD_AGGRESSIVE	TXXX:MOOD_AGGRESSIVE
Mood Arousal	TXXX:MOOD_AROUSAL	TXXX:MOOD_AROUSAL
Mood Danceability	TXXX:MOOD_DANCEABILITY	TXXX:MOOD_DANCEABILITY
Mood Electronic	TXXX:MOOD_ELECTRONIC	TXXX:MOOD_ELECTRONIC
Mood Happy	TXXX:MOOD_HAPPY	TXXX:MOOD_HAPPY
Mood Instrumental	TXXX:MOOD_INSTRUMENTAL	TXXX:MOOD_INSTRUMENTAL
Mood Party	TXXX:MOOD_PARTY	TXXX:MOOD_PARTY
Mood Relaxed	TXXX:MOOD_RELAXED	TXXX:MOOD_RELAXED
Mood Sad	TXXX:MOOD_SAD	TXXX:MOOD_SAD
Movement	MVNM	MVNM
Movement No	MVIN	MVIN
Movement Total	MVIN	MVIN
MusicBrainz Artist Id	TXXX:MusicBrainz Artist Id	TXXX:MusicBrainz Artist Id
MusicBrainz Disc Id	TXXX:MusicBrainz Disc Id	TXXX:MusicBrainz Disc Id
MusicBrainz Original Release Id	TXXX:MusicBrainz Original Album Id	TXXX:MusicBrainz Original Album Id
MusicBrainz Release Artist Id	TXXX:MusicBrainz Album Artist Id	TXXX:MusicBrainz Album Artist Id
MusicBrainz Release Group Id	TXXX:MusicBrainz Release Group Id	TXXX:MusicBrainz Release Group Id
MusicBrainz Release Id	TXXX:MusicBrainz Album Id	TXXX:MusicBrainz Album Id
MusicBrainz Track Id	UFID:http://musicbrainz.org	UFID:http://musicbrainz.org
MusicBrainz Work Id	TXXX:MusicBrainz Work Id	TXXX:MusicBrainz Work Id
MusicBrainz Work	TXXX:MUSICBRAINZ_WORK	TXXX::MUSICBRAINZ_WORK
MusicBrainz Work Composition	TXXX:MUSICBRAINZ_WORK_ COMPOSITION	TXXX:MUSICBRAINZ_WORK_ COMPOSITION
MusicBrainz Work Composition Id	TXXX:MUSICBRAINZ_WORK _COMPOSITION_ID	TXXX:MUSICBRAINZ_WORK _COMPOSITION_ID
MusicBrainz Work Part LevelN N	TXXX:MUSICBRAINZ_WORK _PART _LEVELN	TXXX:MUSICBRAINZ_WORK_PART_LEVEL

Field name	ID3v23	ID3v24
MusicBrainz	TXXX:MUSICBRAINZ_WORK_PAR	
Work Part Level N Type	_LEVELN_TYPE	_PART_LEVELN_TYPE
MusicBrainz Work Part Level N Id	TXXX:MUSICBRAINZ_WORK _PART_LEVELN_ID	TXXX:MUSICBRAINZ_WORK _PART_LEVELN_ID
Official Artist Site URL	WOAR	WOAR
Official Release Site URL	WXXX:OFFICIAL_RELEASE	WXXX:OFFICIAL_RELEASE
Opus	TXXX:OPUS	TXXX:OPUS
Orchestra	TXXX:ORCHESTRA	TXXX:ORCHESTRA
Orchestra Sort	TXXX:ORCHESTRA_SORT	TXXX:ORCHESTRA_SORTt
Original Album	TOAL	TOAL
Original Artist	TOPE	TOPE
Original Lyricist	TEXT	TEXT
Original Release Date	TORY	TDOR
Overall Work	TXXX:OVERALL_WORK	TXXX:OVERALL_WORK
Part Number	TXXX:PARTNUMBER	TXXX:PARTNUMBER
Part Type	TXXX:PART_TYPE	TXXX:PART_TYPE
Performer	IPLS	TMCL
Performer Name	TXXX:PERFORMER_NAME	TXXX:PERFORMER_NAME
Performer Name Sort	TXXX:PERFORMER_NAME_SORT	TXXX:PERFORMER_NAME_SORT
Producer	TIPL:producer	TIPL:producer
Release Country	TXXX:MusicBrainz Album Release Country	TXXX:MusicBrainz Album Release Country
Release Status	TXXX:MusicBrainz Album Status	TXXX:MusicBrainz Album Status
Release Type	TXXX:MusicBrainz Album Type	TXXX:MusicBrainz Album Type
Remixer	TPE4	TPE4
Script	TXXX:Script	TXXX:Script
Single Disc Track No	TXXX:SINGLE_DISC_TRACK_NO	TXXX:SINGLE_DISC_TRACK_NO
Subtitle	TIT3	TIT3
Tags	TXXX:Tags	TXXX:Tags
Title	TIT2	TIT2
Title Sort	TSOT	TSOT
Tonality	TXXX:TONALITY	TXXX:TONALITY
Total Discs	TPOS	TPOS
Total Tracks	TRCK	TRCK
Track Number	TRCK	TRCK
Wikipedia Artist Site URL	WXXX:WIKIPEDIA_ARTIST	WXXX:WIKIPEDIA_ARTIST

Field name	ID3v23	ID3v24
Wikipedia Release Site URL	WXXX:WIKIPEDIA_RELEASE	WXXX:WIKIPEDIA_RELEASE
Work	TXXX:WORK	TXXX:WORK
Work Type	TXXX:WORK_TYPE	TXXX:WORK_TYPE

MP4 and Wma Formats

Field mapping for Mp4 and Wma music formats

Table 7.

Field name	Mp4	Wma
AcoustId Fingerprint	:com.apple.iTunes:Acoustid Fingerprint	Acoustid/Fingerprint
AcoustId Id	:com.apple.iTunes:Acoustid Id	Acoustid/Id
Album	©alb	WM/Album Title
Album Artist	aART	WM/Album Artist
Album Artist Sort	soaa	WM/AlbumArtistSortOrder
Album Artists	:com.apple.iTunes:ALBUM_ARTISTS	ALBUM_ARTISTS
Album Artists Sort	:com.apple.iTunes:ALBUM_ARTISTS_SORT	TALBUM_ARTISTS_SORT
Album Sort	soal	WM/AlbumSortOrder
Arranger	:com.apple.iTunes:ARRANGER	WM/Arranger
Arranger Sort	:com.apple.iTunes:ARRANGER_SORT	WM/ARRANGER_SORT
Artist	©ART	Author
Artist Sort	soar	WM/ArtistSortOrder
Artists	:com.apple.iTunes:ARTISTS	WM/ARTISTS
Artists Sort	:com.apple.iTunes:ARTISTS_SORT	ARTISTS_SORT
ASIN	:com.apple.iTunes:ASIN	ASIN
Bar-code	:com.apple.iTunes:BARCODE	WM/Bar-code
BPM	tmpo	WM/BeatsPerMinute
Catalog Number	:com.apple.iTunes:CATALOGNUMBER	WM/CatalogNo
Choir	:com.apple.iTunes:CHOIR	CHOIR
Choir Sort	:com.apple.iTunes:CHOIR_SORT	CHOIR_SORT
Classical Catalog No	:com.apple.iTunes:CLASSICAL_CATALOG	CLASSICAL_CATALOG
Classical Nickname	:com.apple.iTunes:CLASSICAL_NICKNAMI	ECLASSICAL_NICKNAME
Comment	©cmt	WM/Comments (DESCRIPTION)
Composer	©wrt	WM/Composer
Composer Sort	soco	WM/ComposerSort
Conductor	:com.apple.iTunes:CONDUCTOR	WM/Conductor
Conductor Sort	:com.apple.iTunes:CONDUCTOR_SORT	CONDUCTOR_SORT
Copyright	cprt	Copyright
Country	:com.apple.iTunes:Country	WM/Country
Cover Art	covr	WM/Picture

Eigld name	Mn4	Wma
Field name	Mp4	Wma
Date	©day	WM/Year
Disc Number Disc Subtitle	disk	WM/PartOfSet
	:com.apple.iTunes:DISCSUBTITLE	WM/SetSubTitle
URL URL	:com.apple.iTunes: URL_DISCOGS_ARTIST_SITE	WM/DiscogsArtistUrl
Discogs Release Site URL	:com.apple.iTunes: URL_DISCOGS_RELEASE_SITE	WM/DiscogsReleaseUrl
DJ Mixer	:com.apple.iTunes:DJMIXER	MUSICBRAINZ_ALBUMSTATUS
Encoded By	©too	WM/EncodedBy (WM/ToolName)
Engineer	:com.apple.iTunes:ENGINEER	WM/Engineer
Ensemble	:com.apple.iTunes:ENSEMBLE	ENSEMBLE
Ensemble Sort	:com.apple.iTunes:ENSEMBLE_SORT	ENSEMBLE_SORT
Genre	©gen	WM/Genre
Grouping	©grp	WM/ContentGroupDescription
Instrument	:com.apple.iTunes:INSTRUMENT	INSTRUMENT
ISRC	:com.apple.iTunes:ISRC	WM/ISRC
Is Classical	:com.apple.iTunes:IS_CLASSICAL	IS_CLASSICAL
Is Compilation	cpil	WM/IS_COMPILATION
Is Greatest Hits	:com.apple.iTunes:IS_GREATEST_HITS	IS_GREATEST_HITS
Is Soundtrack	:com.apple.iTunes:IS_SOUNDTRACK	IS_SOUNDTRACK
Key	:com.apple.iTunes:initialKey	WM/InitialKey
Label	:com.apple.iTunes:LABEL	WM/Publisher
Language	:com.apple.iTunes:LANGUAGE	WM/Language
Lyricist	:com.apple.iTunes:LYRICIST	WM/Writer
Media	:com.apple.iTunes:MEDIA	WM/Media
Mixer	:com.apple.iTunes:MIXER	WM/Mixer
Mood	:com.apple.iTunes:MOOD	WM/Mood
Mood Aggressive	:com.apple.iTunes:MOOD_AGGRESSIVE	MOOD_AGGRESSIVE
Mood Relaxed	:com.apple.iTunes:MOOD_RELAXED	MOOD_RELAXED
Mood Sad	:com.apple.iTunes:MOOD_SAD	MOOD_SAD
Mood Happy	:com.apple.iTunes:MOOD_HAPPY	MOOD_HAPPY
Mood Party	:com.apple.iTunes:MOOD_PARTY	MOOD_PARTY
Mood Danceability	:com.apple.iTunes:MOOD_DANCEABILIY	MOOD_DANCEABILITY
Mood Acoustic	:com.apple.iTunes:MOOD_ACOUSTIC	MOOD_ACOUSTIC
Mood Electronic	:com.apple.iTunes:MOOD_ELECTRONIC	MOOD_ELECTRONIC
Mood Instrumental	:com.apple.iTunes:MOOD_INSTRUMENTA	LMOOD_INSTRUMENTAL
Movement	©mvn	MOVEMENT
Movement No	©mvi	MOVEMENT_NO
Movement Total	©mvc	MOVEMENT_TOTAL
MusicBrainz Artist Id	:com.apple.iTunes: MusicBrainz Artist Id	MusicBrainz/Artist Id

Field name	Mp4	Wma
MusicBrainz Disc Id	:com.apple.iTunes:MusicBrainz Disc Id	MusicBrainz/Disc Id
MusicBrainz Original Release Id	:com.apple.iTunes:MusicBrainz Original Album Id	MusicBrainz/Original Album Id
MusicBrainz Release Artist Id	:com.apple.iTunes:MusicBrainz Album Artist Id	MusicBrainz/Album Artist Id
MusicBrainz Release Group Id	:com.apple.iTunes:MusicBrainz Release Group Id	MusicBrainz/Release Group Id
MusicBrainz Release Id	:com.apple.iTunes:MusicBrainz Album Id	MusicBrainz/Album Id
MusicBrainz Track Id	:com.apple.iTunes:MusicBrainz Track Id	MusicBrainz/Track Id
MusicBrainz Work Id	:com.apple.iTunes:MusicBrainz Work Id	MusicBrainz/Work Id
MusicBrainz Work Composition Id	:com.apple.iTunes: MUSICBRAINZ_WORK_COMPOSITION_ID	MUSICBRAINZ _WORK_COMPOSITION_ID
MusicBrainz Work Part Level N	:com.apple.iTunes: MUSICBRAINZ_WORK_PART_LEVELN	MUSICBRAINZ _WORK_PART_LEVELN
MusicBrainz Work Part Level N Id	:com.apple.iTunes: MUSICBRAINZ_WORK_PART_LEVELN_ID	MUSICBRAINZ _WORK_PART_LEVELN_ID
I	:com.apple.iTunes: MUSICBRAINZ_WORK_PART_LEVELN_TY	MUSICBRAINZ PEWORK_PART_LEVELN_TYPE
Official Artist Site URL	:com.apple.iTunes: URL_OFFICIAL_ARTIST_SITE	WM/AuthorURL
Official Release Site URL	:com.apple.iTunes: URL_OFFICIAL_RELEASE_SITE	WM/OfficialReleaseUrl
Opus	:com.apple.iTunes:OPUS	OPUS
Orchestra	:com.apple.iTunes:ORCHESTRA	ORCHESTRA
Orchestra Sort	:com.apple.iTunes:ORCHESTRA_SORT	ORCHESTRA_SORT
Original Album	:com.apple.iTunes:ORIGINAL ALBUM	WM/OriginalAlbumTitle
Original Artist	:com.apple.iTunes:ORIGINAL ARTIST	WM/OriginalArtist
Original Lyricist	:com.apple.iTunes:ORIGINAL LYRICIST	WM/OriginalLyricist
Original Release Date	:com.apple.iTunes:ORIGINAL YEAR	WM/OriginalReleaseYear
Overall Work	:com.apple.iTunes:OVERALL_WORK	OVERALL_WORK
Part Number	:com.apple.iTunes:PARTNUMBER	PARTNUMBER
Part Type	:com.apple.iTunes:PART_TYPE	PART_TYPE
Performer	:com.apple.iTunes:Performer	WM/Performer
Performer Name	:com.apple.iTunes:PERFORMER_NAME	PERFORMER_NAME
Performer Name Sort	:com.apple.iTunes: PERFORMER_NAME_SORT	PERFORMER_NAME_SORT
Producer	:com.apple.iTunes:PRODUCER	WM/Producer
Release Country	:com.apple.iTunes:MusicBrainz Album Release Country	MusicBrainz/Album Release Country
Release Status	:com.apple.iTunes:MusicBrainz Album Status	MusicBrainz/Album Status

Field name	Mp4	Wma
Release Type	:com.apple.iTunes:MusicBrainz Album Type	MusicBrainz/Album Type
Remixer	:com.apple.iTunes:REMIXER	WM/ModifiedBy
Script	:com.apple.iTunes:SCRIPT	WM/Script
Single Disc Track No	:com.apple.iTunes:SINGLE_DISC_TRACK_	NSINGLE_DISC_TRACK_NO
Subtitle	:com.apple.iTunes:SUBTITLE	WM/SubTitle
Tags	:com.apple.iTunes:TAGS	WM/Tags
Title	©nam	Title
Title Sort	sonm	WM/TitleSortOrder
Tonality	:com.apple.iTunes.TONALITY	TONALITY
Total Discs	disk	WM/DiscTotal
Total Tracks	trkn	WM/TrackTotal
Track Number	trkn	WM/TrackNumber
Wikipedia Artist Site URL	:com.apple.iTunes: URL_WIKIPEDIA_ARTIST_SITE	WM/WikipediaArtistUrl
Wikipedia Release Site URL	:com.apple.iTunes: URL_WIKIPEDIA_RELEASE_SITE	WM/WikipediaReleaseUrl
MusicBrainz Work	:com.apple.iTunes: MUSICBRAINZ_WORK	MUSICBRAINZ_WORK
MusicBrainz Work Composition	:com.apple.iTunes: MUSICBRAINZ_WORK_COMPOSITION	MUSICBRAINZ_WORK_COMPOSITION
MusicBrainz Work Part Level N	:com.apple.iTunes: MUSICBRAINZ_WORK_PART_LEVEL1	MUSICBRAINZ_WORK_PART_LEVEL1
	:com.apple.iTunes:MUSICBRAINZ_WORK_PART_LEVEL1_TYPE	WM/WorkPartLevelNType
Work Type	:com.apple.iTunes:WORK TYPE	WM/WorkType

Ogg and Flac Audio Formats

Field mapping for Ogg and Flac music formats

Table 8.

Field name	OggVorbis	Flac
AcoustId Fingerprint	ACOUSTID_FINGERPRINT	ACOUSTID_FINGERPRINT
AcoustId Id	ACOUSTID_ID	ACOUSTID_ID
Album	ALBUM	ALBUM
Album Artist	ALBUMARTIST	ALBUMARTIST
Album Artist Sort	ALBUMARTISTSORT	ALBUMARTISTSORT
Album Artists	ALBUM_ARTISTS	ALBUM_ARTISTS
Album Artists Sort	ALBUM_ARTISTS_SORT	ALBUM_ARTISTS_SORT
Album Sort	ALBUMSORT	ALBUMSORT
Arranger	ARRANGER	ARRANGER
Arranger Sort	ARRANGER_SORT	ARRANGER_SORT
Artist	ARTIST	ARTIST
Artist Sort	ARTISTSORT	ARTISTSORT
Artists	ARTISTS	ARTISTS

Field name OggVorbis Flac

Artists_Sort ARTISTS_SORT ARTISTS_SORT

ASIN ASIN ASIN Barcode BARCODE BARCODE

BPM BPM BPM

Catalog Number CATALOGNUMBER CATALOGNUMBER

Choir CHOIR CHOIR

Choir Sort CHOIR_SORT CHOIR_SORT

Classical Catalog CLASSICAL_CATALOG CLASSICAL_CATALOG
Classical Nickname CLASSICAL_NICKNAME CLASSICAL_NICKNAME

Comment COMMENT COMMENT
Composer COMPOSER COMPOSER

Composer Sort COMPOSERSORT COMPOSERSORT
Conductor CONDUCTOR CONDUCTOR

Conductor Sort CONDUCTOR_SORT CONDUCTOR_SORT

Copyright COPYRIGHT COPYRIGHT
Country COUNTRY COUNTRY

Cover Art METDATABLOCKDATAPICTUREMETDATABLOCKDATAPICTURE

Date DATE DATE

Disc NumberDISCNUMBERDISCNUMBERDisc SubtitleDISCSUBTITLEDISCSUBTITLE

Discogs Artist Site URL URL_DISCOGS_ARTIST_SITE URL_DISCOGS_ARTIST_SITE

Discogs Release Site URL_DISCOGS_RELEASE_SITE URL_DISCOGS_RELEASE_SITE

URL

DJ Mixer DJMIXER DJMIXER
Encoded By VENDOR VENDOR
Engineer ENGINEER ENGINEER
Ensemble ENSEMBLE ENSEMBLE

Ensemble Sort ENSEMBLE_SORT ENSEMBLE_SORT

Genre GENRE GENRE
Grouping GROUPING GROUPING
Instrument INSTRUMENT INSTRUMENT

ISRC ISRC ISRC

Is ClassicalIS_CLASSICALIS_CLASSICALIs CompilationIS_COMPILATIONIS_COMPILATIONIs Greatest HitsIS_GREATEST_HITSIS_GREATEST_HITSIs SoundtrackIS_SOUNDTRACKIS_SOUNDTRACK

Key KEY **KEY** Label LABEL LABEL Language LANGUAGE LANGUAGE Lyricist LYRICIST LYRICIST Media **MEDIA MEDIA** Mixer MIXER **MIXER**

Field name	OggVorbis	Flac
Mood	MOOD	MOOD
Mood Aggressive	MOOD_AGGRESSIVE	MOOD_AGGRESSIVE
Mood Relaxed	MOOD_RELAXED	MOOD_RELAXED
Mood Sad	MOOD_SAD	MOOD_SAD
Mood Happy	MOOD_HAPPY	MOOD_HAPPY
Mood Party	MOOD_PARTY	MOOD_PARTY
Mood Danceability	MOOD_DANCEABILITY	MOOD_DANCEABILITY
Mood Acoustic	MOOD_ACOUSTIC	MOOD_ACOUSTIC
Mood Electronic	MOOD_ELECTRONIC	MOOD_ELECTRONIC
Mood Instrumental	MOOD_INSTRUMENTAL	MOOD_INSTRUMENTAL
Movement	MOVEMENT	MOVEMENT
Movement No	MOVEMENT_NO	MOVEMENT_NO
Movement Total	MOVEMENT_TOTAL	MOVEMENT_TOTAL
MusicBrainz Artist Id	MUSICBRAINZ_ARTISTID	MUSICBRAINZ_ARTISTID
MusicBrainz Disc Id	MUSICBRAINZ_DISCID	MUSICBRAINZ_DISCID
MusicBrainz Original Release Id	MUSICBRAINZ_ ORIGINALALBUMID	MUSICBRAINZ_ ORIGINALALBUMID
MusicBrainz Release Artist Id	MUSICBRAINZ_ALBUMARTISTI	DMUSICBRAINZ_ALBUMARTISTID
MusicBrainz Release Group Id	MUSICBRAINZ_ RELEASE_GROUPID	MUSICBRAINZ_RELEASE_GROUPID
MusicBrainz Release Id	MUSICBRAINZ_ALBUMID	MUSICBRAINZ_ALBUMID
MusicBrainz Track Id	MUSICBRAINZ_TRACKID	MUSICBRAINZ_TRACKID
MusicBrainz Work Id	MUSICBRAINZ_WORKID	MUSICBRAINZ_WORKID
MusicBrainz Work Composition	MUSICBRAINZ_WORK_ COMPOSITION	MUSICBRAINZ_WORK_COMPOSITION
MusicBrainz Work Composition Id	MUSICBRAINZ_WORK_ COMPOSITION_ID	MUSICBRAINZ_WORK_COMPOSITION_ID
MusicBrainz Work Part LevelN N	MUSICBRAINZ_WORK_ PART_LEVEL_N	MUSICBRAINZ_WORK_PART_LEVEL_N
MusicBrainz Work Part LevelN Type N Type	MUSICBRAINZ_WORK_ PART_LEVEL_N_TYPE	MUSICBRAINZ_WORK_PART_LEVEL_N_TYPI
MusicBrainz Work Part LevelN Id	MUSICBRAINZ_WORK_ PART_LEVELN_ID	MUSICBRAINZ_WORK_PART_LEVELN_ID
MusicBrainz Work	MUSICBRAINZ_WORK	MUSICBRAINZ_WORK
Official Artist Site URL	URL_OFFICIAL_ARTIST_SITE	URL_OFFICIAL_ARTIST_SITE
Opus	OPUS	OPUS
Orchestra	ORCHESTRA	ORCHESTRA
Orchestra Sort	ORCHESTRA_SORT	ORCHESTRA_SORT
Official Release Site URL	URL_OFFICIAL_RELEASE_SITE	URL_OFFICIAL_RELEASE_SITE
Original Album	ORIGINAL ALBUM	ORIGINAL ALBUM
Original Artist	ORIGINAL ARTIST	ORIGINAL ARTIST

Field name	OggVorbis	Flac
Original Release Date	ORIGINALDATE (ORIGINAL_YEAR)	ORIGINALDATE (ORIGINAL_YEAR)
Overall Work	OVERALL_WORK	OVERALL_WORK
Part Number	PARTNUMBER	PARTNUMBER
Part Type	PART_TYPE	PART_TYPE
Performer	PERFORMER	PERFORMER
Performer Name	PERFORMER_NAME	PERFORMER_NAME
Performer Name Sort	PERFORMER_NAME_SORT	PERFORMER_NAME_SORT
Producer	PRODUCER	PRODUCER
Release Country	RELEASECOUNTRY	RELEASECOUNTRY
Release Status	MUSICBRAINZ_ALBUMSTATUS	MUSICBRAINZ_ALBUMSTATUS
Release Type	MUSICBRAINZ_ALBUMTYPE	MUSICBRAINZ_ALBUMTYPE
Remixer	REMIXER	REMIXER
Script	SCRIPT	SCRIPT
Single Disc Track No	SINGLE_DISC_TRACK_NO	SINGLE_DISC_TRACK_NO
Subtitle	SUBTITLE	SUBTITLE
Tags	TAGS	TAGS
Title	TITLE	TITLE
Title Sort Order	TITLESORT	TITLESORT
Tonality	TONALITY	TONALITY
Total Discs	DISCTOTAL	DISCTOTAL
Total Tracks	TRACKTOTAL	TRACKTOTAL
Track Number	TRACKNUMBER	TRACKNUMBER
Wikipedia Artist Site URL	URL_WIKIPEDIA_ARTIST_SITE	URL_WIKIPEDIA_ARTIST_SITE
Wikipedia Release Site URL	URL_WIKIPEDIA_RELEASE_SITI	EURL_WIKIPEDIA_RELEASE_SITE
Work	WORK	WORK
Work Type	WORK_TYPE	WORK_TYPE

Performance

Memory Usage

The main SongKong window contains some useful performance statistics on the task bar at the bottom of the window.

When SongKong is started the maximum memory it can ever use is specified, this is the second value and SongKong can never use more memory than this regardless of how much memory your computer actually has whereas the first value is how much of that memory SongKong is actually using. Note that SongKong uses a garbage collector to release memory that is no longer required and this is called periodically, if SongKong is nowhere near max memory usage it tries to recover memory less often than it could, and so the current memory usage may be higher than SongKong is actually using.

Under normal circumstances you should need to modify the memory settings, but increasing the memory allocated to SongKong may improve performance. If you encounter a memory problem increasing the memory levels should alleviate the issue.

Windows 32-bit

Modify the maximum memory allocated by editing SongKong.ini

For example to set it to 4GB of memory

- In Windows Explorer go to C:\Program Files(x86)\JThink\SongKong
- Select SongKong.ini file, then right click and select Edit
- Modify the value of vm.heapsize.preferred to 4000
- Select Save

Windows 64-bit

Modify the maximum memory allocated by editing SongKong64.ini,

For example to set it to 4GB of memory

- In Windows Explorer go to C:\Program Files\JThink\SongKong
- Select SongKong64.ini file, then right click and select Edit
- Modify the value of vm.heapsize.preferred to 4000
- Select Save

MacOS

Modify the maximum memory allocated by editing /Applications/SongKong.app/Info.plist,

For example to set it to 4GB of memory

- In Finder click on Applications: SongKong and select Show Package Contents
- Select Contents folder, then right click on Info.plist and select with Open with TextEdit
- Within TextEdit Go to the end of the file and add this line to set memory to 4GB after the <string>-Dapple.awt.brushMetalLook=true</string>

```
<string>-XmX4000M<string>
```

• Within TextEdit select Save

Linux

Modify the maximum memory allocated by editing songkong.sh.

For example to set it to 4GB of memory

- Open songkong.sh with editor
- Modify -Xmx1800m to -Xmx4000m
- · Save changes