

# User Manual

Version 2.9

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## What's new in ExsManager 2.9

### New features:

- ExsManager 2.9 is fully compatible with Logic Pro 7.2, Logic Express 7.2, Garageband 3 and Tiger OSX 10.4 on both Power PC and Intel platforms.
- Now Universal Binary for full performance with the new Mac computers based on Intel architecture, with no need to use Rosetta.
- New “Do not change modification date” option for Instruments: when enabled, the modification date of Instruments is not changed in normal relink or reorganization processing. This is useful for keeping track of when you last edited an instrument.

## 4 What's New

# What's new in ExsManager 2.8

## New features:

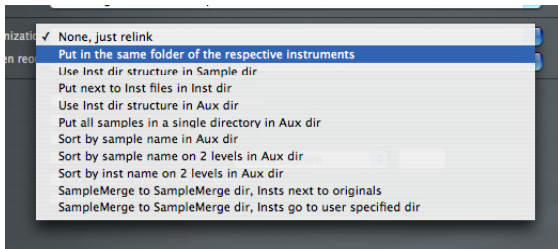
- ExsManager 2.8 is fully compatible with Logic Pro 7.1, Logic Express 7.1, Garageband 2 and Tiger OSX 10.4
- New French language localization
- Faster CRC algorithms
- Compiled using the latest compiler optimizing technology

## 6 What's New

# What's new in ExsManager 2.7

## New features:

- ExsManager 2.7 is fully compatible with Logic Pro 7 and Logic Express 7
- ExsManager now also supports GarageBand instruments for all functions, except SampleMerge
- New organization mode: “put samples in the same folder of the instruments”



- ExsManager can now optionally scan sample files whose filenames have no proper extensions (.aif/.wav/...) and determine the right file type. This and the “fix filename extensions” function allows for proper detection and renaming (fix) of all extension-less wav and aiff samples (Logic 7 built in library has this problem).

Also scan files without suffix

## Improvements and changes:

- Improved SampleMerge, with support for exotic, non standard, AIFF formats.
- ExsManager now fully supports samples and instruments with international and non-ASCII character sets (greek, umlauts, japanese, etc).
- Optimized clean functions. Now much faster for large sets.

## 8 What's New

- Fixed some small errors in text labels.



# What's new in ExsManager 2.6

## New features:

- New reference matching method for solving the most complex situations. Matching can now be also done with multiple different samples of the same name, based on the most similar path to the required one.
- New check and fix option for detecting and fixing sample format specification mismatches in instruments.
- New log window for displaying problems and errors
- New option for renaming instrument names to a maximum of 24 characters plus “.exs” extension. This solves the “instrumen#3443634” problem in Exs24 when dealing with long instrument names

## Improvements and changes:

- New Redmatica color scheme
- Improved SampleMerge process: faster processing for small size merging
- Improved SampleMerge process: support for creation of self-defragmenting merged sample files (.ex2) (requires OSX 10.3 or later and a journaled sample volume)
- Improved handling of instruments and samples with unsupported characters
- Improved handling of badly converted instruments
- Improvements of manual assignation of samples to instruments
- General fixes and improvements



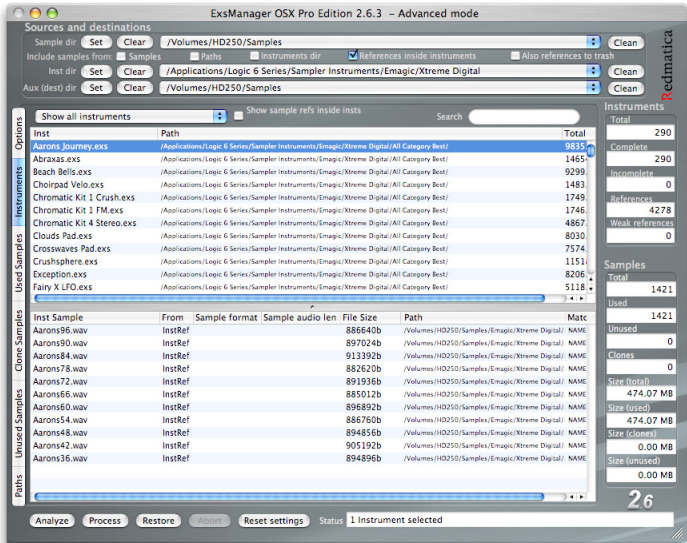
# About ExsManager

ExsManager is a standalone program for management of Apple Exs24 instruments and relative samples. Exs24 is a wonderful sampler with a lot of capabilities. Many pro studios using Logic have been converting from hardware based sampling to Exs24 sampling during the last few years. This has caused an explosion of the average count of instrument and sample files on the typical studio hard disk. The reorganization tasks that could be done by hand when we were dealing with hundreds or few thousands of files, have become impossible to tackle with the modern huge libraries now available. ExsManager is the solution to a myriad of little tasks and problems that are encountered daily by the Exs24 pro users. And more...

## Main Features

- Quick relink of instruments to samples for instant loading in Exs24
- Hard disk reorganization of samples and, partially, of instruments based on multiple different methods, including consolidation of samples in a small number of large sample files.
- Detection and processing of clone (duplicate) samples with optional quick CRC check for maximum safety
- Detection and processing of unused samples
- Comprehensive visualization of instrument/sample sets complete of various search modes
- Options for doing backups, selective copies, copying sample files next to song instruments, etc..
- Options for properly renaming samples and instruments and for assigning proper creator codes
- Options for taking snapshots of instrument and sample locations for later restoring
- Designed from start for large sets. Processes in seconds and minutes, not hours

- Universal binary optimized for the full range of Mac processors from G4 to G5 and also for the newest Intel range



NOTE: in this document we refer to Exs24, but the software is fully compatible with Exs24mk2 and ExsP24.

# Basic Concepts

The Apple Exs24 sampler uses 2 kinds of files for its operations: instrument files and samples. Instrument files contain all the Exs24 parameters, zone settings, groups, and a list of references to sample files. The system works beautifully when, on instrument loading, Exs24 finds the samples exactly in the places the references indicate they should be. In this way load time will be next to zero. When, for various reasons, Exs24 doesn't find the samples at their referenced location, it must search them on the hard disk, and with nowadays typical huge sample libraries this can be a long slow operation. Logic 6 introduced Project Manager for handling the task of keeping track of references to resources by using a database. While being an excellent overall solution, it lacks some of the features needed to handle an efficient, well-maintained and well-organized sample library.

ExsManager doesn't use a stored database, as it will quickly get out of sync with the reality once you start using the finder to manipulate your sample set. Copy stuff, move stuff, copy samples from backups, etc....

What we do instead is a two step process consisting of an Analysis phase and a Process phase. The Analysis phase gathers data from hard disk, depending on various settings, and builds a database on the fly in ram. The Process phase will instead use the analysis data and process instruments and samples file based on the chosen action.

*Note: if the idea of analyzing every time your whole sample library scares you, and you have this image of hours spent scanning the hard disk, well, you can now relax. Everything in ExsManager has been designed to be as fast as possible -and sometimes even more than possible - so that the program works*

*in seconds and minutes and not hours.*

The main element on which ExsManager (EM from now on) works is the "Instrument set". An Instrument set is composed of 2 directories: an Instrument directory and its relative Sample directory. You can also include samples from the instrument directory and from any location pointed by instrument references. All analysis and processing is limited to the currently specified set. And so terms that we will use, as "unused", "clone", "references" are relative to what we are looking at. If, as example, you specify an instrument directory that contains no instruments, all samples from the Sample directory will be of course marked as unused, even if some instrument (outside of the currently set empty Instrument directory) will use them.

For most tasks you will simply set the Sample directory to your top Sample folder, and the Instrument directory to the “Sampler Instruments” directory of Logic, and you will always work on your whole instrument set. Of course if you have just to update references in a subset, it’s more efficient to change the current Instrument directory to just the needed subdirectory.

## Analysis phase concepts and definitions

A Reference is a data structure inside the instrument file that points to a sample file location on the hard disk.

In the analysis phase, all samples are scanned from the current Sample set and then, based on the references of the scanned instruments, samples are marked as Used, Clones, Unused. Let’s examine them:

Unused samples are samples that aren’t referenced by the scanned instruments. Probably they belong to other instruments, or some logic audio recording went into the sample directory by mistake, or you simply did a big mess last time you used the finder J

Used samples are samples that are referenced (used) by the scanned instruments.

Clone samples are samples that are identical to some of the used samples. The detection of clone samples is done with several methods, as you will read in a later section of this manual. But the important concept to grasp here is that if, as example, 10 samples are detected identical and at least one of them is used by instruments, only 1 sample (which we’ll name Primary sample) will be marked as used, and the remaining other 9 as clones. By default, if you relink the set, all references of instruments that were using any of those 10 samples will be updated to point to the single sample marked as used, which in this way will be shared between instruments. Unused samples are never checked for clones, so the total number of samples is always given by used+clones+unused.

Instruments are instead marked as Complete or Incomplete, depending if all of the referenced samples are found or not. Incomplete instruments are processed for the part of references that could be found. Any reference not found is left untouched.

For various reasons, some of the references in Exs24 instruments might be “weak”, i.e. they might point to a sample file, but the file length of the sample, as specified in the reference, won’t match. This happens usually when you edit a sample with an external editor and shorten or lengthen it a bit. By default these weak references will not be processed. But an option allows you to use them too.

## Processing phase concepts and definitions

### Relink

One of the basic operations that can be done in EM is the relink.

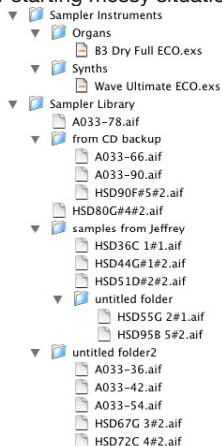
“Relink” is defined as the process of updating the instrument references to the actual sample locations. If a reference inside an instrument file can't be updated because the sample was not found in the Sample directory, that reference will be left unchanged. This allows you to relink instruments with a subset of samples without changing the rest of references.

### Reorganization

“Reorganization” is instead defined as the process of moving (or copying) samples from their current hard disk location to a new one, based on a defined method. As a picture is worth one thousand words, let's show an example, through use of a few snapshots.

To simplify, in this example we will just deal with 2 instruments and 15 samples.

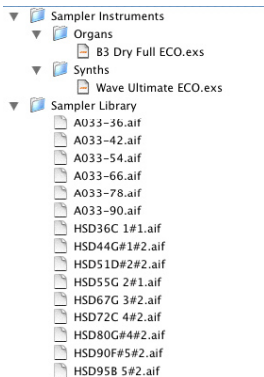
So let's imagine this is our starting messy situation.



As we want to get rid of that mess, let's try the reorganization mode “put samples in a single dir”.

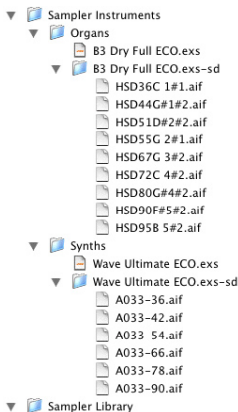


We get this:



But wait, we wanted to get rid of the mess, but now all the samples are confusingly one next to each other!

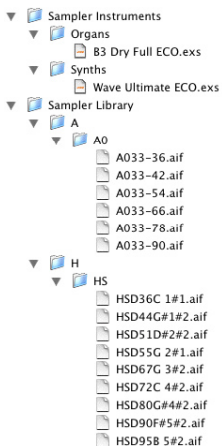
Let's correct our mistake and apply the reorganization method "put next to inst files in inst dir":



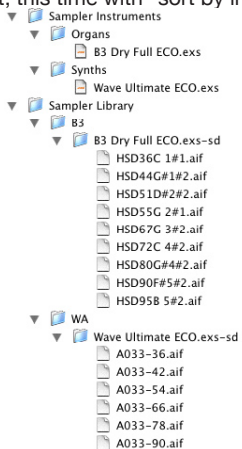
Much better already isn't it?

But wait, it's bad practice to put samples inside the sampler instrument dir (even if this could be very cool for backups)!

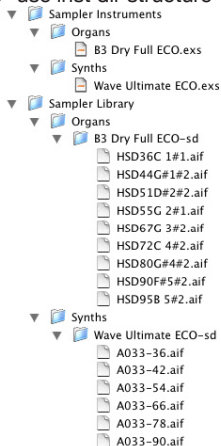
Let's reorganize again using "Sort by sample names on 2 levels":



Now, I can access samples by knowing their names.... But... oh, I want to access samples with finder by knowing the instrument name! Let's reorganize again the set, this time with "sort by inst name on 2 levels":



Not bad now, but honestly I worked day and night putting my instruments directories in some order and would prefer that the samples keep a similar structure. Let's apply the "use inst dir structure" method then:



Ok, now we are finally satisfied...

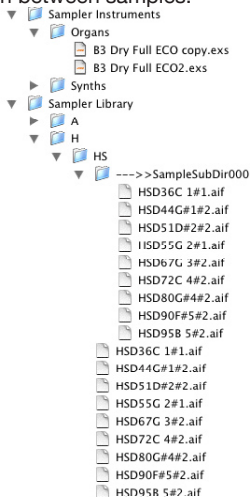
(Note from the editor: we were also starting to run out of methods)

The nice thing is that reorganizations are fast processes, done in seconds or few minutes at max, and you can always switch reorganization model at will. The time used for reorganizing the examples above was so low on an ibook g3-700 to be immeasurable in seconds.

Status Analysis completed in 1sec - Process completed in 0sec - Total time: 1sec

Even more, if you have a reorganization model in mind that is not currently implemented, let us know and if found useful we will gladly implement it.

If the reorganization model is such that sample files collide (i.e. 2 samples with the same name go to the same directory), a safety algorithm will create a sequentially numbered subdirectory for one of the sample. In the following example, we did create a copy of one instrument, and reorganized by sample names without sharing samples. The subdir000 was automatically created to avoid collision between samples.



The reorganization process is relative only to the used samples. The other types of samples, clones and unused aren't part of the reorganization and as such won't be moved. But these two kinds of samples can be deleted or moved to a separate directory by option.

Important: samples are usually never renamed by EM, just moved. This ensures full compatibility with Exs24 and PM search engines at any time. The only option in EM that might actually change sample names is the "fix extensions" sample option (see later for a description of this)

When reorganizing, the user can select the amount of sample sharing between instruments. For most uses, sample sharing is very effective as it reduces the amount of hard disk space used. But you can always specify to expand sample usage so that each instrument gets a fully independent

sample set. Of course more hard disk space will be used. As with any reorganization option, you can safely go back and forth between the two modes. If you make changes to any sample file here and there, be sure to detect clones using the CRC option (full file crc) and you will never have any problem.

Instruments on the other hand, unlike samples, can't be reorganized, but some processing can be specified for a few special cases. Incomplete instruments can be optionally deleted or moved to separate folders. We use plural because the folders are two, one for totally incomplete instruments, and the other one for partially incomplete instruments.

Also, instruments can be scanned inside sample directory and optionally moved to the proper instrument directory.

The same anti-collision safety algorithm used for samples is used for instrument files. So, exactly as for samples, no instrument file can be overwritten by another one. There is one exception to this rule, and it's for SampleMerged instruments. A complete explanation of the SampleMerge process is found in the next section.

## SampleMerge

SampleMerge is a new reorganization mode first introduced in ExsManager 2.5. More in detail, SampleMerge is the process of combining all the samples of an instrument in a single sample file (or in a small number of files). A new instrument with a -MRG suffix is also created, so that the original (sample and instrument) files are not modified at all. Only wav and aiff sample formats are supported for this process. Sd2 file format is explicitly not supported.

To overcome several technical problems, a new sample format ".ex2" has been defined for this task by Redmatica. Any Exs24 version will read this special custom format, with no need of special support or Logic upgrades. However, editing of samples and managing with Project manager can't be done on this format directly. For this and a number of other reasons, SampleMerged instruments are not meant as a distribution format, but just as a local play format. Users that need to edit a sound, will edit the normal format exs instrument, then will SampleMerge it again.

In normal use, when the benefits of samplemerging are really needed, this won't be a huge problem.

Newly created SampleMerged instruments are usually created in the same directory as the normal exs instruments (that will be untouched by the process). SampleMerged sample files can be placed anywhere on the computer. Source samples won't be modified in any way. EM normal relink/reorg operations will work with the new format too.

The processing has been optimized to be as fast as possible and of course it will \*greatly\* benefit from fast disks. We are potentially moving fractions of gigabytes for every (large) instrument here.

After the samplemerge process ends, you can see in Exs24 that next to each instrument there is a new "-MRG" instrument. For all record/playback purposes, this instrument can be used instead of the normal one.

SampleMerged Instruments containing references to missing samples or to sd2 files, will keep referencing those items, so the process is quite safe.

Important note: the SampleMerge process is currently irreversible, i.e. once you merge some samples, you can't split the .ex2 files back to the original files. So unless you know very well what you are doing, we strongly suggest to not delete the original files.

Here are some special things to remember about SampleMerge:

- SampleMerged instruments can't be SampleMerged twice. If this is attempted, they will be simply ignored by EM.
- You can still relink and reorganize .ex2 files exactly as for the other sample formats.
- Logic's project manager or Exs24 search engine will not work with .ex2 files. Samplemerged instruments will be marked in red as incomplete even if fully working. You will have to use EM to manage/relink them.
- If you SampleMerge some instruments, and SampleMerged files for these instruments already exists in the destination directory, they will be overwritten without warning. This allows you to tweak the original files, samplemerge again, and songs using samplemerged instruments will be automatically using the updated files.
- As each .ex2 file can contain a max of 2Gb of data , larger sets are

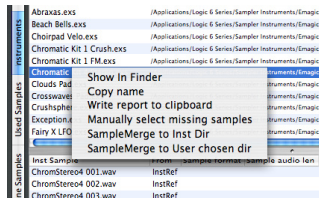
automatically split in chunks of 2gb, and the appropriate number of files is automatically created.

- The user can choose to limit the maximum filesize of .ex2 files to smaller values in order to fit files on Cds or DVDs for backup purposes.
- Samples with different sample rate, bitdepth, number of channels, etc.. are allocated to different .ex2 sample files, and this is the reason for why you can still get several files of much less size than selected.

The main advantage in samplemerging is that you can work around the current (as of OSX 10.3.2 and Logic Platinum 6.3.2) limitation of maximum around 10000 sample files open when streaming. As samplemerged instruments usually reference just a single consolidated .ex2 sample file (or a small number anyway), you can now open as many instruments as you want. For complex instruments, you will also get the combined advantages of faster load times (as we are opening a single sample file, and not thousands), and more ram available for Logic/Exs24 streaming (as each open file uses a small but not irrelevant individual I/O ram buffer allocated by the OS).

Important note: while you still can edit sample points, loops, etc of samplemerged instruments, we strongly recommend to always edit only the original files and use samplemerge strictly to generate an optimized playback format. Samplemerge is a format privately developed by Redmatica and unsupported by Apple, and for this reason compatibility with .ex2 files might not be guaranteed for future releases of Exs24. For this same exact reason, we also strongly recommend to not use samplemerged files as a distribution format.

The samplemerge process is also available after analysis, as a contextual menu from the instrument view as shown in the following picture.



## Snapshot/Restore

A full snapshot/restore capability has been implemented. The user can now activate a function that will write to a dedicated directory a snapshot file containing the locations of Exs24 files before applying the various reorganization processing. This happens automatically (unless the user disables it) every time a “process” is done, as a safety net for users unsatisfied of the resulting reorganization. The user can also activate an option that will allow him/her to write an \*additional\* snapshot file to a user chosen location. Note that you can go “back in time” anytime, and also out of order, as this is not really an undo, but an extensive “reorganizer” based on script files.

While most people will use this as a kind of reorganization “undo”, it’s very handy also for keeping “organized snapshots” of your library. The file format of the snapshots is a very simple .txt format, and this is interesting also as a way to manipulate desired locations with a text editor or with simple external custom programs.

For restoring the old positions, there’s now a dedicated “restore” button. Once clicked, user is asked for a snapshot file to restore, then the process starts automatically. Another option allows to relink instruments automatically at the end of the restore processing.

The restore system works by moving files from the currently analyzed instrument/sample set according to the snapshot file. So, only the instruments and samples analyzed will be relocated to their original place (if such entries were existing at the moment of snapshot creation, otherwise they will be ignored). This is very handy for doing selective restores.

Important note: this function is different from a true undo function. While the location of files will be restored, the actual content of the sample and instrument files won’t be. Also, the restore function will not work for files that have been renamed in the meantime (even if by use of other EM functions). The same limitation applies for deleted files. Once a file is deleted, the restore function can’t recreate/recover it.



# Operations guide

Exs Manager has two different levels of use, Simplified mode and Advanced mode, selectable from the menu bar. You can switch between the two modes at any time, even while the program is running. Every relevant user interface element in both modes has an associated tooltip, so you can position the mouse over it and read a short explanation.

Let's start checking the simplified mode.

## Simplified mode

Simplified mode shows you the bare minimum necessary to relink an instrument set.



In this mode, you simply set the Sample and Instrument directory and start a relink. You can abort at anytime. If you are aborting in the update phase, a warning will allow you to resume or really abort.

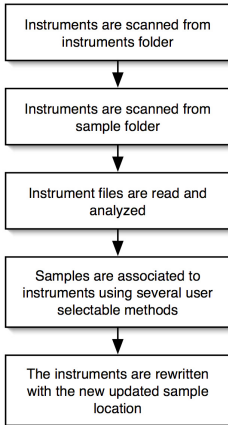
Note that a history of used sample and instrument directories is maintained and accessible through the use of popup menu for convenience.

And that's all.

Here's the overall scheme of things that gets done in simplified mode:

## Relink in simplified mode

(what happens when you click "Relink")



# Advanced mode

The Advanced mode shows you all selectable options and browsable views of the program.

From top to bottom you see:

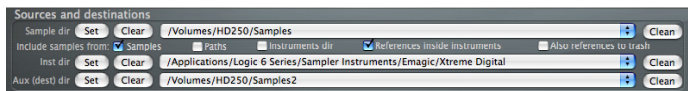
- the main source and destination directory paths to be used for scanning and optional reorganizing
- a big tabbed view that let you set options, view instrument/samples relationships and set a list of additional sample paths
- on the right we have a statistics column for instruments and samples
- on the bottom we have 3 buttons for starting operations and on the right again a status bar

The screenshot displays the ExsManager OSX Pro Edition 2.6.3 - Advanced mode interface. The window is divided into several sections:

- Top Panel:** Contains fields for 'Sample dir', 'Include samples from', 'Inst dir', and 'Aux (dest) dir', each with a 'Set' and 'Clear' button. The paths are set to '/Volumes/HD250/Samples'.
- Options Panel:** Includes checkboxes for 'References inside instruments' and 'Also references to trash'.
- Instruments Table:** A table listing instruments with columns for 'Inst', 'Path', and 'Total'. The 'Aarons Journey.exs' instrument is selected.
- Samples Table:** A detailed table with columns: 'Inst', 'Sample', 'From', 'Sample format', 'Sample audio len', 'File Size', 'Path', and 'Matc'. It lists various sample files like 'Aarons96.wav' and 'Aarons90.wav'.
- Statistics Panel (Right):** Shows counts for 'Instruments' (Total: 290, Complete: 290, Incomplete: 0, References: 4278, Weak references: 0) and 'Samples' (Total: 1421, Used: 1421, Unused: 0, Clones: 0). It also shows 'Size (total)' as 474.07 MB and 'Size (unused)' as 0.00 MB.
- Bottom Panel:** Features buttons for 'Analyze', 'Process', 'Restore', 'Abort', and 'Reset settings'. The status bar indicates 'Status 1 Instrument selected'.

Let's analyze in detail the single elements:

## Sources and Destinations



There are three separate main paths that you can set in EM. The two obvious ones are the Sample directory and the Instrument directory. Samples can also be included from other places, independently switchable: from inside the instrument directory, or directly from the sample references inside the found instruments. We can optionally exclude sample references that point to the trashcan. You can also include samples from a list of sample Paths, which are added/removed in a specific tabview page (see later). Finally, we have an Auxiliary directory (used as destination only) which is used as sample destination for some of the sample reorganization process modes. The three “Clean” buttons on the right simply delete any empty directory found inside each of the corresponding Sample, Instrument, Aux directories. No harm to existing files or non-empty directories will be/can be done. Each of the 3 directories also maintain a history of previously selected directory paths, accessible through their corresponding popup menus. The “Clear” buttons reset the history lists.

**[SAMPLE DIR]** This is the main Sample directory.

**[INCLUDE SAMPLES FROM SAMPLE DIR]** This switch enables scanning for samples in the Sample directory.

**[INCLUDE SAMPLES FROM PATHS]** This switch enables scanning for samples in the directories specified in the Paths list.

**[INCLUDE SAMPLES FROM INSTRUMENT DIR]** This switch enables scanning for samples in Instrument directory too.

**[INCLUDE SAMPLES FROM REFERENCES INSIDE INSTRUMENTS]** This switch enables scanning for samples in the exact sample locations specified by each instrument references. Be careful that the references might point to any valid path of your filesystem, not only inside the sample or instrument directory.

**[ALSO REFERENCES TO TRASH]** When “include samples from references inside

instruments” is enabled, this switch enables or disabled the use of references that point to the trashcan.

**[INST DIRECTORY]** This is the directory where instruments will be scanned. An option for searching instrument files inside the sample directory is also available in the Instrument options section. The description is in the next chapter.

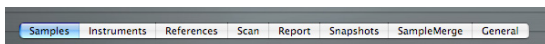
**[AUX DIRECTORY]** This is the directory that will be used as sample destination for some reorganization modes (see later in the options: samples section)

**[CLEAN]** These buttons delete any empty directory found inside each of the 3 corresponding directories.

**[CLEAR]** These buttons delete the history list of recently set directories.

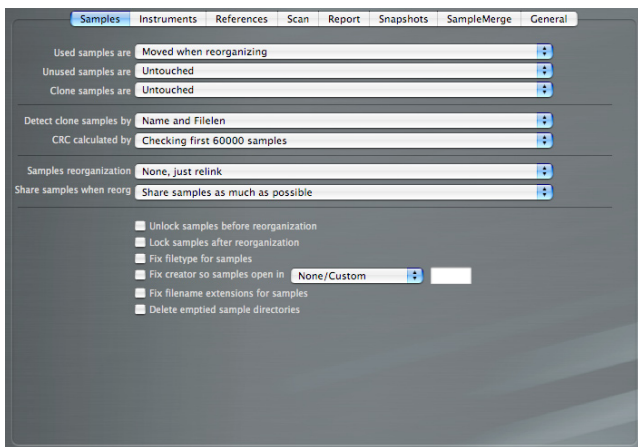
# Options

The options section is composed of 8 sections relative respectively to samples, instrument, references, scan settings, reports, snapshots, samplemerge functions and general application behavior.



## Options: Samples

The first section is all about samples.



**[USED SAMPLES ARE]** With this popup menu we can choose if the samples will be moved or copied when reorganizing samples. A “move” is usually used when we want to reorganize the original sample set, and we are simply moving around the original sample files. A “copy” is usually needed for when we want to create a new separate reorganized copy of the original sample set (for a backup, or for other reasons). In other words when the original sample files must stay where they are. “Copy” mode is a lot slower than move mode, as the actual content of the sample files has to be read and

written again. Available choices are

**MOVED WHEN REORGANIZING:** Samples will be moved from the original location when reorganizing

**COPIED WHEN REORGANIZING:** Samples will be copied from the original location when reorganizing

**[UNUSED SAMPLES ARE]** With this popup menu we can choose the processing performed on unused samples. An “unused sample” is a sample that is not referenced by any instrument, or that does not have any clone sample referenced by any instrument. In other words, an audio file completely disassociated with the current instrument set. Available choices are:

**UNTOUCHED:** No processing will be done on unused samples

**DELETED:** Unused samples will be deleted

**MOVED TO SEPARATE DIRECTORY (all samples in a single directory):** Unused samples will be moved from the original position to a newly created subdirectory (subdir “->Unused samples”) inside the sample directory. All moved samples will go in this single subdirectory, with no sample directory hierarchy maintained.

**MOVED TO SEPARATE DIRECTORY (maintain hierarchies):** Unused samples will be moved from the original position to a newly created subdirectory (subdir “->Unused samples”) inside the sample directory. The directory hierarchy of the moved samples will be maintained as much as possible.

**[CLONE SAMPLES ARE]** With this popup menu we can select the processing to be made on clone samples. A “clone sample” is an exact duplicate of another sample (the Primary sample) referenced by instruments. When a group of sample files are found to be identical, only one of these samples is promoted to Primary sample and will be used for processing and relinking to instruments, while all the remaining identical copies are marked as Clones. Available choices are:

**UNTOUCHED:** No special additional processing will be done on clone samples

**DELETED:** Clone samples will be deleted

**MOVED TO SEPARATE DIRECTORY (all samples in a single directory):** Clone samples will be moved from original position to a newly created subdirectory (subdir “->Clone samples”) inside the sample directory. All moved samples will go in this single subdirectory, with no sample directory hierarchy maintained.

**MOVED TO SEPARATE DIRECTORY (maintain hierarchies):** Clone samples will be moved from original position to a newly created subdirectory (subdir “->Clone samples”) inside the sample directory. The directory hierarchy of the moved samples will be kept as much as possible.

**[DETECT CLONE SAMPLE BY]** With this popup menu we can select the method for detecting when two samples are to be considerate clones (duplicates). Some methods use CRC for improved precision.

Note: The use of CRC greatly enhances the precision of matching clone samples, and it’s recommended, but it causes additional hard disk accesses, resulting in slightly slower processing. This is normal and expected.

**NAME AND FILELEN:** With this method, two samples will be considered clones if they have the same filename and file length. Note that there is no guarantee that the actual contents are the same. This is the fastest method.

**NAME AND FILELEN AND CRC:** With this method, two samples will be



considered clones if they have the same filename and file length and the same CRC. If the CRC is performed on the whole file, there is an absolute guarantee that the actual contents are the same.

**FILELEN AND CRC:** With this method, two samples will be considered clones if they have the file length and the same CRC. If the CRC is performed on the whole file, there is an absolute guarantee that the actual contents are the same. Note that this method recognizes as clones also samples with different filenames. This is the method to use for detecting any possible form of duplicate sample files in your sample dir, but it can possibly change the name of the samples inside instruments, and in certain cases this is not something you want to do.

**[CRC CALCULATED BY]** With this popup menu select the method to use for calculating CRCs. Available choices are:

**CHECKING FIRST 60000 SAMPLES:** With this method, the CRC is calculated only of the first 60000 samples. This includes the aiff and wav headers for the loop points, sample rate, bit depth, and the attack portion of the sample, and it's a good compromise between processing time and accuracy. Be warned that this method will mark samples incorrectly as clones when for example you have several copies of the same sample but the sample audio tail has been altered (compressed, chorused, etc). Admittedly rare but might happen. Of course if the sample file lengths are different, they will never be marked as clones anyway.

**CHECKING THE COMPLETE FILE:** With this method, the CRC is calculated on the complete file, headers and audio data. Even if only a single sample byte differs between two identically named files of same length, the CRC will be different, and they won't be marked as clones, that is, if **[DETECT CLONE SAMPLE BY]** is set to include CRC of course.

**[SAMPLES REORGANIZATION]** With this important popup menu we can choose if we just want to relink the instruments to samples, or if we also want to reorganize samples in order to have a clean and logically structured sample set.

Note that the reorganization process never changes the sample names: only the sample locations change. If two or more samples with the same name collide, i.e. they are moved to the same directory because of the reorganization method, a sequence of differently named destination subdirectories are automatically created for resolving the conflict. This mechanism guarantees that no sample can get overwritten. An exception to this rule exists for merged samples (created by the samplemerge process).

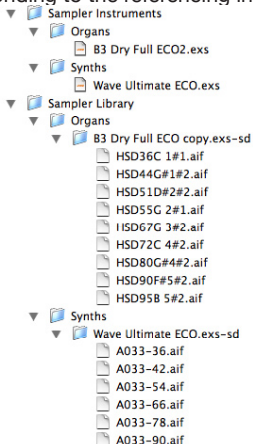
*NOTE: The fact that the samples are not renamed ensures that Exs24 traditional search engine and Logic's builtin Project Manager will later be able to relocate and relink the samples, in any way we reorganize them. From this point of view, ExsManager is totally compatible with the Exs24 and PM search procedures.*

Most of the reorganization methods use the Aux directory as destination. This is a very convenient method to put samples in a different place than your normal sample directory. Of course nothing forbids you from setting the Aux directory to the same path as the Sample directory. New reorganization methods can be added easily, and Redmatica is very open to implement new, interesting methods based on user suggestions.

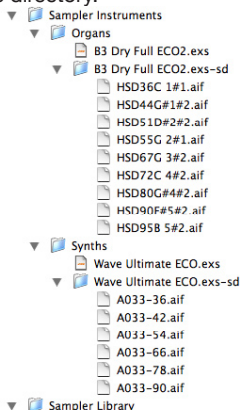
Currently the available choices are:

**NONE, JUST RELINK:** No sample reorganization will be done. The instruments will be relinked to the current sample locations.

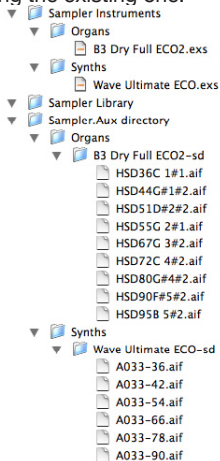
**USE INST STRUCTURE IN SAMPLE DIR:** Samples will be reorganized, then relinked with instruments. The reorganization method will recreate, inside the sample directory, the exact directory and subdirectory structure of the instrument. After this, the samples will be moved/copied in the locations (always inside the sample directory) corresponding to the referencing instruments.



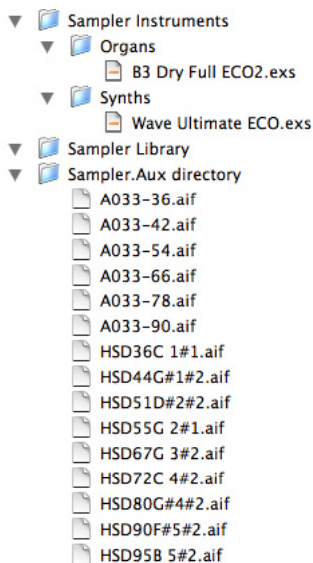
**PUT NEXT INST FILES IN INST DIR:** Samples will be reorganized, then relinked with instruments. The reorganization model will move/copy the samples in newly created subdirectories inside the instrument directory where the referencing instrument is located, next to each instrument file. For each instrument named xyz.exs, a corresponding xyz.exs-sd (sd is for sample directory) will be created in the same directory.



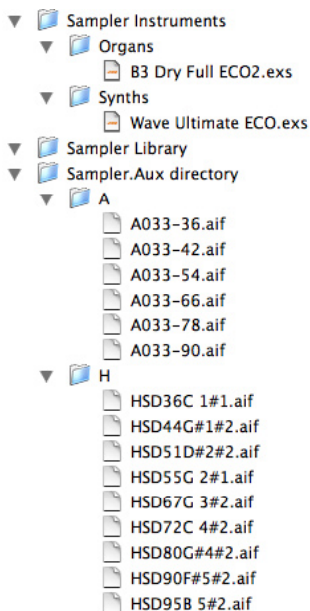
**USE INST STRUCTURE IN AUX DIR:** This is like “USE INST STRUCTURE IN SAMPLE DIR”, with the difference that the reorganized samples and subfolders will be moved/copied and created inside the Aux directory and not the Sample directory. This mode is useful for creating backup sets, or for creating a new sample set without necessarily modifying the existing one.



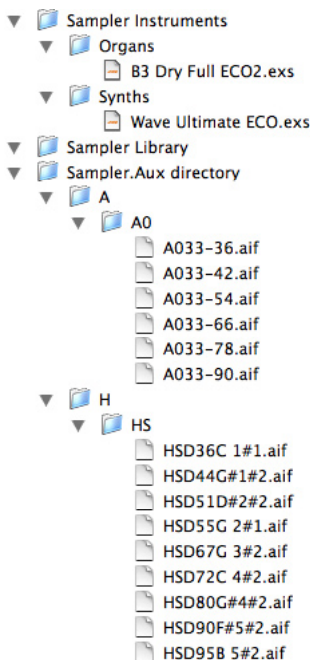
**PUT ALL SAMPLES IN A SINGLE SUBDIR IN AUX DIR:** All the samples will be moved/copied in a single, newly created subdir (subdir “Samples”) inside Aux directory. Note that if too many files (>500) are moved to the same directory, a major slowdown will occur when trying to access that directory. So we suggest spending a few seconds thinking if you really need to put 20000 samples in the same directory J



**SORT BY SAMPLE NAME IN AUX DIR:** All the samples will be moved/copied in a set of newly created subdirs inside the Aux directory. The directories are named “A” -> “Z”. Each sample will be moved/copied in the corresponding subdirectory that matches the first char of sample name. As example, “saxophone.wav” will go to /AuxDir/S/saxophone.wav”, while “harmonica.aiff” will go to /AuxDir/H/harmonica.aiff.

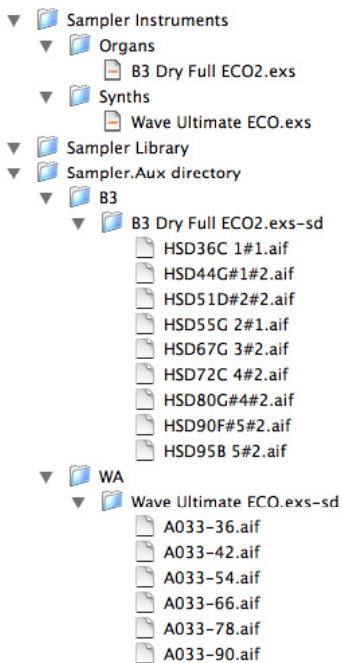


**SORT BY SAMPLE NAME ON 2 LEVELS IN AUX DIR:** This is an extension on 2 levels of the previous reorganization model. Samples will be moved/copied to a set of newly created subdirectories inside the Aux directory. The directories have two levels, each composed of “A” -> “Z” subdirectories. Each sample will be put in the corresponding subdirectory that matches the first two chars of the sample name. As example, “saxophone.wav” will go to /AuxDir/S/SA/saxophone.wav”, while “piano.aiff” will go to /AuxDir/P/PI/piano.aiff.





**SORT BY INST NAME ON 2 LEVELS IN AUX DIR:** This is like the previous method, but uses the referencing instrument name instead of the sample name.



**SAMPLEMERGE TO SAMPLEMERGE DIR,INSTS NEXT TO ORIGINAL:** This method uses the SampleMerge algorithm and works differently from the previous ones, as the instruments and sample files are not modified/updated/moved/relinked. Instead, a new independent set of samples and instrument is created depending on the settings found in the SampleMerge options page. A detailed description of the SampleMerge process is provided in a specific chapter at the beginning of this manual. Suffice it here to say that the newly created samplemerged instruments will be written in the same directory of the original instrument. Merged samples are instead written in the globally specified SampleMerge directory as set in the SampleMerge option tab.

**SAMPLEMERGE TO SAMPLEMERGE DIR,INSTS GO TO USER SPECIFIED DIR:** This method works as the previous one, but this time the user is asked for a directory where to write the newly created samplemerge instruments. Samples still go to the global SampleMerge directory.

**[SHARE SAMPLES WHEN REORG]** With this popup menu we can select the amount of sample sharing between instruments that we want when reorganizing. This option has no affect on simple relink. Also note that for user convenience, merged samples (from the SampleMerge process) have an independent (share/not share) setting in the SampleMerge options page.

**SHARE SAMPLES AS MUCH AS POSSIBLE:** With this method, if multiple instruments use a sample, only a single copy of the sample will be used and all the instrument references will point to that single sample.

**EXPAND SAMPLES:** With this method, if multiple instruments use a sample, each instrument will reference its own independent copy of the sample. If we have 10 drum kits referencing a single snare sample, 9 new copies of the sample will be made and each instrument will use its own separate sample file.

**[FIX FILETYPE FOR SAMPLES]** With this setting, we can select to fix the HFS filetype for all the found samples. This is especially important for libraries imported from Windows systems.

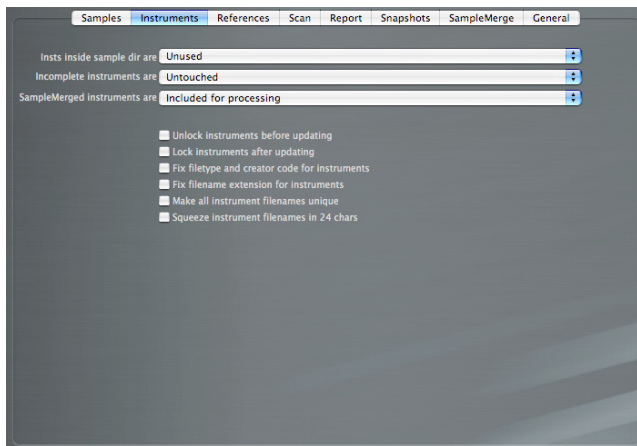
**[FIX CREATOR SO SAMPLES OPEN IN]:** With this setting, we can select to fix the HFS creator code for all the found samples. Once the creator code is fixed, double clicking on a sample in finder will open it in your preferred editor/player. This is especially useful for libraries imported from Windows systems. A list of the most popular editors/players is supplied. If you need to specify a different creator code, you can input it manually.

*NOTE: The “fix creator so samples open in” is an option for processing samples. If you double click samples shown in the EM lists before you process them, the sample will open in the editor/player currently specified by that file, and not in the program specified the “fix creator...” option. It’s only after processing, that the samples will open in the selected program.*

**[FIX FILENAME EXTENSIONS FOR SAMPLES]:** With this setting, we can select to fix any missing/incorrect filename suffix for all the found samples, so that samples in aiff format will get a “.aif” extension, samples in wav format will get a “.wav” extension, and sd2 format sample will get a “.sd2” extension.

**[DELETE EMPTIED SAMPLE DIRECTORIES]:** With this setting, we can select to delete the directories in the sample directory that have been emptied by effect of a reorganization. Only the empty directories that were containing samples will be deleted. If no reorganization has been set, this option has no effect.

## Options: Instruments



**[INST INSIDE SAMPLE DIR ARE]** With this popup menu we can select if the instrument files eventually found inside the sample directory are to be ignored or processed. Available choices are

**UNUSED:** Any instrument file found inside the Sample directory will be ignored

**DELETED:** Any instrument file found inside the Sample directory will be deleted

**INCLUDED:** Any instrument file found inside the Sample directory will be scanned and analyzed and eventually updated, exactly as all others instruments found in the user set instrument directory. But the file will not be moved from his current location.

**INCLUDED AND MOVED TO INST DIRECTORY** (all inst files in a single dir): Any instrument file found inside the sample directory will be first moved to a newly created subdirectory (“->Instrument From Sample Dir”) in the instrument directory and then scanned and analyzed and eventually updated exactly as all others instruments

found in the instrument directory. This option allows us to move all instruments from the sample directory to the place where they belong, the main Exs24 instrument dir. All moved instrument files will be moved into a single directory, discarding their previous directory hierarchy.

**INCLUDED AND MOVED TO INST DIRECTORY (maintain hierarchy):** Any instrument file found inside the sample directory will be first moved to a newly created subdirectory (“\Instrument From Sample Dir”) in the instrument directory and then scanned and analyzed and eventually updated exactly as all others instruments found in the instrument directory. This option allows us to move all instruments from the sample directory to the place where they belong, the main Exs24 instrument dir. All moved instrument files will be maintaining in the best possible way their directory hierarchy.

**[INCOMPLETE INSTRUMENTS ARE]** With this popup menu we can set the processing to be done on incomplete instruments (i.e. instruments that reference at least one sample not found in the current sample set). This optional additional processing is done after relink, so if the incomplete instrument still references a few available samples, these references will be updated. Any reference not found will not be modified and will still point to the originally specified sample location.

*NOTE: the “incompleteness” of instruments is determined at the end of analysis phase. So, an incomplete instrument is defined as an instrument that really lacks some sample files, not just one that references an existing sample but in a wrong location.*

Available choices are:

**UNTOUCHED:** No special additional processing will be done on incomplete instruments

**DELETED:** Any incomplete instrument file will be deleted in the processing phase

**MOVED TO SEPARATE DIRECTORIES(all inst files in a single dir):** Any incomplete instrument will be moved at the end of the processing phase inside one of two specially created subdirectories inside the instrument directory. Depending if the instruments are only

partially incomplete or totally incomplete (i.e. not a single sample has been found) they will be moved in two correspondingly named subdirectories (subdirectory “->Totally Incomplete Inst” and subdirectory “->Partially Incomplete Inst”). All moved instrument files will be moved into a single directory, discarding their previous directory hierarchy.

**MOVED TO SEPARATE DIRECTORIES (maintain hierarchy):** Any incomplete instrument will be moved at the end of the processing phase inside one of two specially created subdirectories inside the instrument directory. Depending if the instruments are only partially incomplete or totally incomplete (i.e. not a single sample has been found) they will be moved in two correspondingly named subdirectories (subdirectory “->Totally Incomplete Inst” and subdirectory “->Partially Incomplete Inst”). All moved instrument files will be maintaining in the best possible way their directory hierarchy.

**[SAMPLEMERGED INSTRUMENTS ARE]** With this popup menu we can set the processing to be done on samplemerged instruments (i.e. instruments that reference at least one samplemerged .ex2).

Available choices are:

**UNUSED:** Samplemerged instruments will be ignored

**DELETED:** Samplemerged instruments will be deleted

**INCLUDED FOR PROCESSING:** Samplemerged instruments will be processed exactly as normal instruments.

**[UNLOCK INSTRUMENTS BEFORE UPDATING]** This option, when enabled, will unlock instrument files before updating them. If you do not enable this, no update can be written to the instruments.

*NOTE: a “locked” file is a file for which the lock flag has been set with finder in the ‘get info’ section. A locked file can’t be modified unless the lock flag is reset.*

**[LOCK INSTRUMENTS AFTER UPDATING]** This option, when enabled, will lock instrument files at the end of the processing phase. This ensures that they won't be accidentally changed for some reason.

*NOTE: a "locked" instrument file can't be updated by Exs24 and PM. This is generally speaking a bad thing, as Exs24 and PM automatically update file formats when new Exs features are added. Also, if you subsequently change sample location manually, a locked instrument file means when you load it, the full slow search will have to be made every time. On the other hand, if you have a costly studio session booked, all the instruments are relinked already and you want to be sure that no mess can happen for any reason, locking the instrument files will be an additional guarantee.*

**[FIX FILETYPE AND CREATOR CODE FOR INSTRUMENTS]** This option, when enabled, will fix instrument files HFS filetype and creator code. Useful for importing instrument files from Windows or Cds.

**[FIX NAME EXTENSION FOR INSTRUMENTS]** This option, when enabled, will fix instrument filenames so that they all get a ".exs" suffix.

**[MAKE ALL INSTRUMENTS FILENAMES UNIQUE]** This option, when enabled, will add a numeric suffix to instrument files so that each instrument filename becomes unique. This solves the problem of not being able to distinguish between identically named instruments.

**[SQUEEZE INSTRUMENT NAMES IN 24 CHARS]** This option, when enabled, renames long instrument names to shorter ones so that they are correctly displayed in the main Exs24 instrument menu. This avoids the dreaded "instrument#34535235" display problem in Exs24. Note that when samplemerging, this operation is performed before the creation of new instruments. So, if you have this option enabled, and you perform a samplemerge, the created instrument filenames will not be squeezed, and you will have to make a 2<sup>nd</sup> "squeeze" analyze/processing pass with ExsManager.

## Options: references

This set of options enables various criteria for matching references (from instrument files) to samples. While the first criteria (Name and Filelength) is the one to use normally, in special situations the other ones might come useful. The matching is attempted in the same order of the options, so that at each “step”, EM tries to match what couldn’t be matched by the previous criteria. Some criteria are computationally more expensive than others, and are marked as “(slow)”. If you keep finding “incomplete instruments”, you can try to enable more and more criteria and see if they solve your condition. When no matching criteria is left, you have a final method available, which is the manual selection of the samples.

Note: if you do not specify any criteria, no matching will be done at all. You should always have at least one criteria enabled.



**[NAME AND FILELENGTH]:** This setting enables matching references to sample files using filename and filelength. The whole size of the sample file, complete with headers, is considered. This is the standard fast matching criteria you should use in EM.



**[NAME AND PATH]** This setting enables matching references to sample files using the filename and path. The size of the sample is not checked at all. This is a good option to use when you have edited your samples in a sample editor, changing their length. If no sample is found at the right path with the correct filename, no match will be done.

**[NAME (IGNORING SUFFIX) and FILELENGTH]:** This is very similar to **[NAME AND FILELENGTH]**, with the important difference that filenames are compared without considering the suffixes (such as .wav/.aif/ etc..)

**[NAME AND PCM CHUNK SIZE]** This setting enables matching references to sample files using filename and length of audio portion of the samples. When enabled, each candidate sample file to the reference, will be scanned to read the header information (which you will then see in the instrument view). This is a good option to use when you edit your samples in a sample editor that adds additional data chunks to your sample files, without changing the length (expressed in samples) of the sample audio data. As an additional file scan is performed, this criteria is the slowest available.

*Note: as the various criteria are checked in sequence and only for matches still unresolved, enabling the previous criteria ([NAME AND FILELENGTH] etc..) will considerably speed up the process, as only the absolute minimum necessary amount of samples will be scanned for header information in this way.*

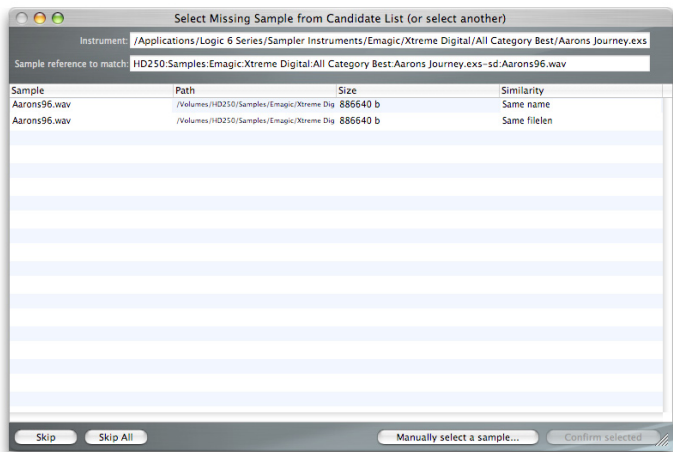
**[NAME ONLY (IF IT'S UNIQUE)]:** This setting enables matching references to sample files using just the filename. The matching will occur only if there's one-and-only one sample file with the right filename

**[NAME AND SIMILARITY OF PATHS]:** This setting enables matching references to sample files using just the filename. The matching will occur even in presence of multiple samples with the same name, by selecting the sample in the folder which better matches the path of the instrument reference.

**[ASK USER IF A MATCH CAN'T BE FOUND]:** This setting enables an interactive mode in the analysis (matching) phase. When enabled, and a match for a reference can't be automatically found, the user will be asked to manually select a sample on the hard disks. A list of possible candidates from the current

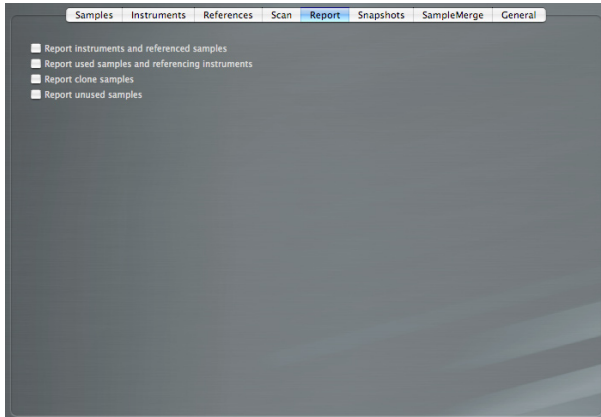
## 50 Operations guide: options

sample set is shown, but it's not a definitive list. If the desired sample is not shown in the proposed list, an arbitrary sample can be selected by clicking "manually select a sample". Using ctrl-click over the "sample reference to match" textbox will open a contextual menu that allows you to copy the sample name to clipboard. This is very useful for pasting the sample name in a finder 'search' window. At any time it's possible to double click over a sample name in the proposed list and open it in the favorite editor/player.



## Options: report

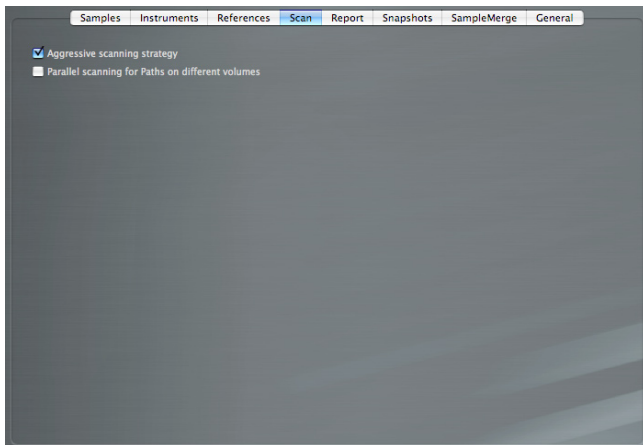
These options determine the data that is written when using the “File/Save report” menu. The reports are meant to be read/printed in courier font, or you will get some incorrect alignments.



The options are quite self explanatory.

## Options: scan

This set of options determine the various modes in which samples and instruments are scanned (searched) on hard disks.

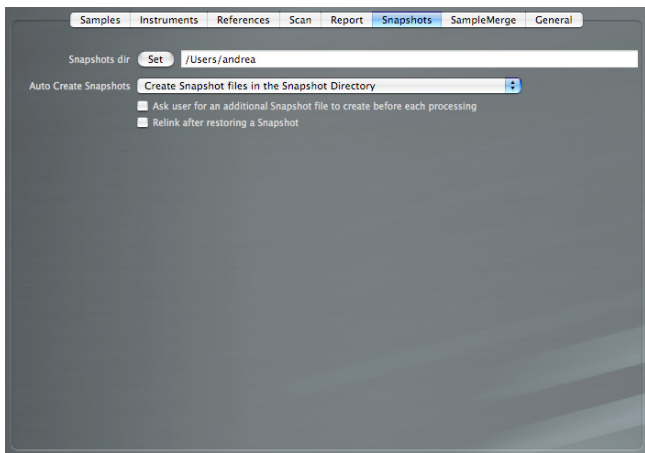


**[AGGRESSIVE SCANNING STRATEGY]:** This option enables a scanning mode where some important data from hard disk is started being read as soon as the program starts, well before the user starts making choices. This allows for faster scans. While the option is generally beneficial, there might be situations where you do not want to access hard disks or network drives until you click the “analysis/process” buttons. The algorithm will greatly benefit from a lot of RAM, even if the peculiarity of the algorithm is that no additional RAM is directly allocated (might seem strange, but this is the way it works).

**[PARALLEL SCANNING FOR PATHS]:** This option enables a special multithreaded scanning mode for the Paths list, where paths pointing to different hard disks (actually volumes), will be scanned simultaneously. This allows a big scanning speedup if your samples are spread over several hard disks, as all the disks will be accessed at the same time, and not sequentially. The option works also for network volumes or mixed network/hard disk environments.

## Options: Snapshots

These are options related to the Snapshot/Restore reorganization process.



**[SNAPSHOTS DIR]:** This is the directory where the automatic snapshot files will be written before each processing.

**[AUTO CREATE SNAPSHOTS]:** With this setting we can select the automatic creation of snapshot files at the start of each “process” we do with EM. This ensures we have a way to go back a reorganization, or a manual change of file locations when using finder. Available choices are:

**DISABLED:** No automatic snapshot creation occurs

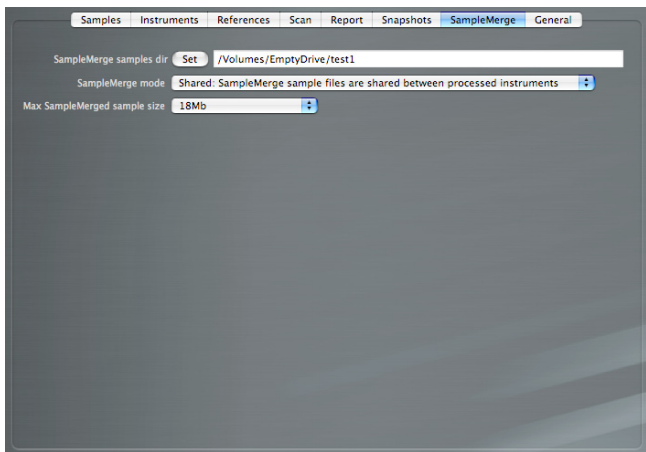
**CREATE:** A snapshot is automatically created and written to disk before processing a set

**[ASK USER TO CREATE...]:** With this setting the user can choose to be asked a second location for where to save an additional second snapshot file.

**[RELINK AFTER RESTORING A SNAPSHOT]:** When enabled, a relink will be performed at the end of the restore process.

## Options: SampleMerge

These are options related to the SampleMerge reorganization process.



**[SAMPLEMERGE SAMPLES DIR]:** This is the directory where the newly created merged sample files will be written.

**[SAMPLEMERGE MODE]:** With this setting we can select the amount of sharing of merged samples between the samplemerge instruments. Available choices are:

**INDEPENDENT:** All newly created samplemerge instruments will use an individual merged sample set.

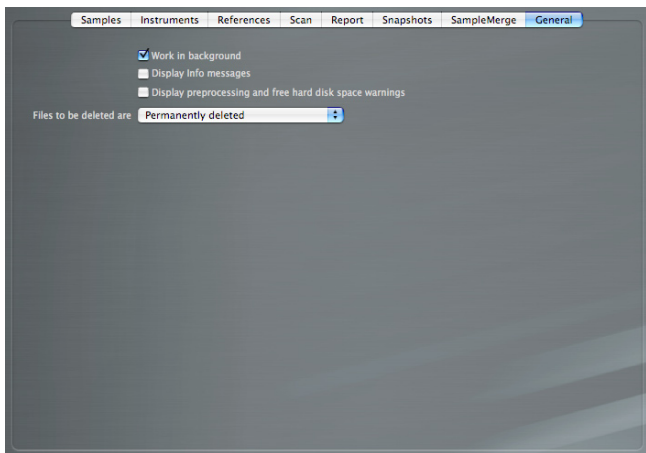
**SHARED:** All newly created samplemerge instruments will use a single shared merged sample set.

**[MAX SAMPLEMERGED SAMPLE SIZE]:** With this setting we can select the maximum desired size in Megabytes for the newly created merged sample files (.ex2 files). The 18mb size is especially important as files of this size are automatically (even if not totally) defragmented by the operating system. In

order for this to work as intended, you need to use OSX 10.3 or later, and keep the samplemerged files on a journaled HFS+ file system.

## Options: general

These are options related to general program behavior.



**[WORK IN BACKGROUND]:** With this setting, we can force EM to work only in the computer idle CPU time. This is very good if we want to do some other stuff with our computer while EM is processing a large library. Of course if EM processing involves copying large files around, the access to HD will still be a little sluggish.

**[DISPLAY INFO MESSAGES]:** With this setting enabled, some alerts will be displayed when we change some specific settings, to help and instruct about what is being done. It's primarily just a help tool and it can be safely turned off when you are confident with the functions and concepts of EM.

**[DISPLAY PREPROCESSING AND FREE HARD DISK SPACE WARNINGS]:** With this setting enabled, some alerts will be displayed when the hard disk free space gets too low. You will also get a full list of warning before doing any potentially destructive operation.

*Important Note: disable this setting only if you have fully understood the*



*operations that ExsManager is going to perform, and its consequences. If you are unsure, leave it enabled.*

**[FILES TO BE DELETED ARE]:** With this setting, we can select the delete mode for all the various ‘delete” options found in EM. You can select to delete immediately files, or alternatively send them to the standard Mac trashcan.

*Important Note: we strongly suggest to always delete to trashcan. This will slow down operations when deleting more than a few thousands files, but will give you a safety net in case you don't get the desired result.*



# Statistics

This section shows the statistics relative to the current sample and instrument set. You can freely check statistics without touching any file, by using “analyze”. You can analyze sets as many times as you want, and process only when satisfied with the results.

## Instruments statistics

Instruments	
Total	290
Complete	290
Incomplete	0
References	4278
Weak references	0

**[TOTAL]** This is the total number of instrument files found

**[COMPLETE]** This is the number of instruments that have a complete set of sample files

**[INCOMPLETE]** This is the number of instruments that do not have a complete set of sample files

*NOTE: the “incompleteness” of instruments is determined only after the analysis, and relatively to the current settings. If you, for example, do not set the correct sample directory, then the instruments will be reported as incomplete because ExsManager didn’t found the samples where you indicated.*

**[REFERENCES]** This is the total number of references found inside instruments

**[WEAK REFERENCES]** This is the number of weak references found. Weak references are analyzed and counted only when the “[NAME AND PATH]” option is enabled in “Reference matching options”.

## Sample statistics

Samples	
Total	1421
Used	1421
Unused	0
Clones	0
Size (total)	474.07 MB
Size (used)	474.07 MB
Size (clones)	0.00 MB
Size (unused)	0.00 MB

**[TOTAL]** This is the total number of sample files found

**[USED]** This is the total number of sample files used by instruments. In case of multiple duplicate files, only 1 sample file will be considered while the other duplicates will be marked and counted as “clones”.

**[UNUSED]** This is the total number of unused samples

**[CLONES]** This is the total number of clone samples

**[SIZE (TOTAL)]** This is the total size of all the found sample files

**[SIZE (USED)]** This is the total size of all the used sample files

**[SIZE (CLONES)]** This is the total size of all the clone sample files

**[SIZE (UNUSED)]** This is the total size of all the unused sample files

## View: instruments and referenced samples

This section shows all the instrument files and the referenced samples for each instrument. Incomplete instruments are marked in red. When selecting an instrument with the mouse, the bottom table will show the samples referenced by that specific instrument. Missing samples will be marked in red too. When enabling “weak reference” processing, the weak references will be evidenced in blue. Instrument not processed because of build limits in the various editions will still be shown but in light gray. At the top we find an input control for searching samples by name.

Inst	Path	Total
Aarons Journey.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	9835
Abraxas.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	1465
Beach Bells.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	9299
Choirpad Veln.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	1483
Chromatic Kit 1 Crush.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	1749
Chromatic Kit 1 FM.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	1746
Chromatic Kit 4 Stereo.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	4857
Clonid Pad.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	8010
Crosswaves Pad.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	7574
Crushsphere.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	1151
Exception.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	8206
Fairy X 1 FD.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/	5118

Inst Sample	From	Sample format	Sample audio len	File Size	Path	Matc
ChromStereo4 001.wav	InstRef			79588b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 002.wav	InstRef			78644b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 003.wav	InstRef			81996b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 004.wav	InstRef			81696b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 005.wav	InstRef			81312b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 006.wav	InstRef			82064b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 007.wav	InstRef			80384b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 008.wav	InstRef			81736b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 009.wav	InstRef			81720b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 010.wav	InstRef			79324b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 011.wav	InstRef			81888b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 012.wav	InstRef			81872b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	
ChromStereo4 013.wav	InstRef			81644b	/Volumes/HD250/Samples/Emagic/Xtreme Digital/ NAME	

In this view we also have a couple of specific settings.

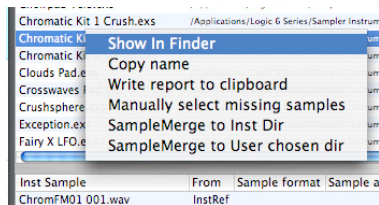
**[SHOW ...]** This menu lets you select to see only certain categories of instruments. Note that this is only a “view” filter. Processing will be done anyway on all the instruments you have analyzed, as specified by the various options. You can currently select to see Complete, Incomplete, Partially Incomplete, Totally Incomplete, Normal or Samplemerged instruments.

**[SHOW ORIGINAL SAMPLE REFS IN INST]** This selects if the path displayed in

the referenced samples is the one contained in the instrument file (the old reference), or the new reference as found by the program. Note that unless you start “process”, no changes/updates will be made to the files.

**[SEARCH]** This is the search input control. If you write a string then press return, you will be shown only the instrument files containing that string (not case sensitive).

There is also a contextual menu for the instrument section. You have to ctrl-press mouse button to see it, or press the right mouse button on a double button mouse.



**[SHOW IN FINDER]** This will open finder windows showing the directories containing the selected instruments.

**[COPY NAME]** This will copy to clipboard the currently selected instrument names. Useful if you want to email a list of samples to someone, or paste them in a document.

**[WRITE REPORT TO CLIPBOARD]** This will write to clipboard a report for the currently selected instruments.

**[MANUALLY SELECT MISSING SAMPLES]** This allows manual selection of missing samples for the selected instruments.

**[SAMPLEMERGE TO INST DIR]** This allows samplemerging of a manually selected set of instruments. The samplemerged instruments will be created next to

the original instrument files.

**[SAMPLEMERGE TO USER CHOSEN DIR]** This allows samplemerging of a manually selected set of instruments. The samplemerged instruments will be created in a user chosen directory.

It's also possible to double click over sample names and the samples will be opened by the editor/player specified by their current creator code.

## View: used samples

This section is a bit the inverse of the previous one. On the top section we have all used samples. When selecting one of these samples with the mouse, the bottom table will show the instruments that reference that specific sample.

Show only samples bigger than <input type="text" value="0.00 Kb"/>				Search <input type="text"/>
Sample	From	Size	Path	
Aarons96.wav	InstRef	886.64 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons90.wav	InstRef	897.02 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons84.wav	InstRef	913.39 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons78.wav	InstRef	882.62 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons72.wav	InstRef	891.94 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons66.wav	InstRef	885.01 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons60.wav	InstRef	896.89 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons54.wav	InstRef	886.76 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons48.wav	InstRef	894.86 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons42.wav	InstRef	905.19 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
Aarons36.wav	InstRef	894.90 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/Aarons Journey.exs-sd/	
AbraXas96.wav	InstRef	978.94 Kb	/Volumes/HD250/Samples/Emagic/Xtreme Digital/All Category Best/AbraXas.exs-sd/	

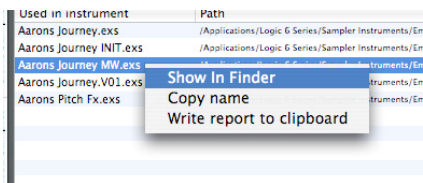
Used in instrument	Path
Aarons Journey.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/All Category Best/
Aarons Journey INIT.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/Initial Waveforms/Synth Sustain/
Aarons Journey MW.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/Motion & FX/
Aarons Journey V01.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/Motion & FX/
Aarons Pitch Fx.exs	/Applications/Logic 6 Series/Sampler Instruments/Emagic/Xtreme Digital/Motion & FX/

**[SHOW ONLY SAMPLES BIGGER THAN]** This setting let you view only used samples bigger than a certain threshold.

**[SEARCH]** This is the search input control. If you write a string then press return. You will be shown only the used samples containing that string.

There is also a contextual menu for the instrument section. You have to ctrl-press mouse button to see it, or press the right mouse button on a double button mouse.





**[SHOW IN FINDER]** This will open finder windows showing the directories containing the selected instruments.

**[COPY NAME]** This will copy to clipboard the currently selected instrument names. Useful if you want to email a list of samples to someone, or paste them in a document.

**[WRITE REPORT TO CLIPBOARD]** This will write to clipboard a report for the currently selected instruments.

It's also possible to double click over sample names and the samples will be opened by the editor/player specified by its creator code.

## View: clone samples

This view shows all clone (duplicate) samples. For each clone sample entry, you can see the “primary” sample that will be used instead.

Clone sample	From	Path	Clone of
Aarons36.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Aarons Journey x	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Aarons Journey.exe-id/Aarons36
Aarons42.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Aarons Journey x	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Aarons Journey.exe-id/Aarons42
Aarons54.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Aarons Journey x	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Aarons Journey.exe-id/Aarons54
Aarons60.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Aarons Journey x	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Aarons Journey.exe-id/Aarons60
Aarons78.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Aarons Journey x	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Aarons Journey.exe-id/Aarons78
Aarons84.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Aarons Journey x	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Aarons Journey.exe-id/Aarons84
Aarons90.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Aarons Journey x	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Aarons Journey.exe-id/Aarons90
Aarons96.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Aarons Journey x	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Aarons Journey.exe-id/Aarons96
Abraaxas36.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas36.wav
Abraaxas42.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas42.wav
Abraaxas48.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas48.wav
Abraaxas54.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas54.wav
Abraaxas60.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas60.wav
Abraaxas66.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas66.wav
Abraaxas72.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas72.wav
Abraaxas78.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas78.wav
Abraaxas84.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas84.wav
Abraaxas90.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas90.wav
Abraaxas96.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Abraaxas.exe-id	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Abraaxas.exe-id/Abraaxas96.wav
BeachBells30.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Beach Bells.exe	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Beach Bells.exe-id/BeachBells30
BeachBells36.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Beach Bells.exe	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Beach Bells.exe-id/BeachBells36
BeachBells42.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Beach Bells.exe	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Beach Bells.exe-id/BeachBells42
BeachBells48.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Beach Bells.exe	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Beach Bells.exe-id/BeachBells48
BeachBells54.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Beach Bells.exe	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Beach Bells.exe-id/BeachBells54
BeachBells60.wav	SmpDir	/Volumes/HD210/Samples/Emagic/XTreme Digital copy/All Category Best/Beach Bells.exe	/Volumes/HD210/Samples/Emagic/XTreme Digital/All Category Best/Beach Bells.exe-id/BeachBells60

**[SHOW ONLY SAMPLES BIGGER THAN]** This setting let you view only clone samples bigger than a certain threshold.

**[SEARCH]** This is the search input control. If you write a string then press return. You will be shown only the clone samples containing that string.

It's also possible to double click over sample names and the samples will be opened by the editor/player specified by its creator code.

## View: unused samples

This view shows all samples marked as unused.

Unused Sample	From	Size	Path
HSD36C 1#1.aif	SmpDir	29.55 Kb	/Volumes/HD250/Samples/Emagic/Factory/83 Dry Full ECO.exs- <i>sd</i> /
HSD44C#1#2.aif	SmpDir	24.05 Kb	/Volumes/HD250/Samples/Emagic/Factory/83 Dry Full ECO.exs- <i>sd</i> /
HSD51D#2#2.aif	SmpDir	20.13 Kb	/Volumes/HD250/Samples/Emagic/Factory/83 Dry Full ECO.exs- <i>sd</i> /
HSD55C 2#1.aif	SmpDir	15.28 Kb	/Volumes/HD250/Samples/Emagic/Factory/83 Dry Full ECO.exs- <i>sd</i> /
HSD67C 3#2.aif	SmpDir	9.03 Kb	/Volumes/HD250/Samples/Emagic/Factory/83 Dry Full ECO.exs- <i>sd</i> /
HSD72C 4#2.aif	SmpDir	10.00 Kb	/Volumes/HD250/Samples/Emagic/Factory/83 Dry Full ECO.exs- <i>sd</i> /
HSD80G#4#2.aif	SmpDir	9.26 Kb	/Volumes/HD250/Samples/Emagic/Factory/83 Dry Full ECO.exs- <i>sd</i> /
HSD90F#5#2.aif	SmpDir	10.09 Kb	/Volumes/HD250/Samples/Emagic/Factory/83 Dry Full ECO.exs- <i>sd</i> /
HSD95B 5#2.aif	SmpDir	13.41 Kb	/Volumes/HD250/Samples/Emagic/Factory/83 Dry Full ECO.exs- <i>sd</i> /
BRASS27D#1-left.aif	SmpDir	427.19 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS27D#1-right.aif	SmpDir	377.40 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS33A1-left.aif	SmpDir	357.77 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS33A1-right.aif	SmpDir	385.78 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS39D#1-left.aif	SmpDir	367.57 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS39D#1-right.aif	SmpDir	368.83 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS45A1-left.aif	SmpDir	368.50 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS45A1-right.aif	SmpDir	367.89 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS51D#2-left.aif	SmpDir	367.90 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS51D#2-right.aif	SmpDir	348.86 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS57A2-left.aif	SmpDir	344.13 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS57A2-right.aif	SmpDir	355.51 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS63D#3-left.aif	SmpDir	359.62 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS63D#3-right.aif	SmpDir	354.85 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS69A3-left.aif	SmpDir	363.98 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS69A3-right.aif	SmpDir	360.40 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS75D#4-left.aif	SmpDir	339.34 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASS75D#4-right.aif	SmpDir	359.08 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /
BRASSR1A4-left.aif	SmpDir	373.40 Kb	/Volumes/HD250/Samples/Emagic/Factory/Brass Section ECO.exs- <i>sd</i> /

**[SHOW ONLY SAMPLES BIGGER THAN]** This setting let you view only unused samples bigger than a certain threshold.

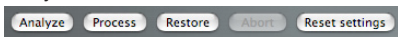
**[SEARCH]** This is the search input control. If you write a string then press return. You will be shown only the unused samples containing that string.

It's also possible to double click over sample names and the samples will be opened by the editor/player specified by its creator code.



## Action buttons and status

This last section contains the 4 buttons used for program operations, and a status line that gives feedback about the current ExsManager operations / selected instrument or samples. Note that starting an analysis or processing, will “capture” the current relevant option settings. If you change a setting after an analysis has been started, that change will be ineffective until next analysis start.



**[ANALYZE]** This button starts the analysis phase. No modification of any kind will be made to files, and you can do as many analysis as you want. The views and the statistics will be populated at the end of the analysis.

**[PROCESS]** This button starts the processing phase, and is active only after an analysis. Depending on the set options, relink and reorganization of the files will be done.

**[RESTORE]:** This button starts the restore process and, exactly as **[PROCESS]**, is active only after you perform an analysis. Note that only the analyzed files will be moved to the original locations as specified by the snapshot file.

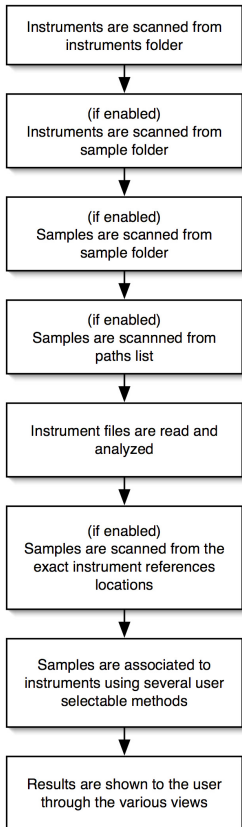
**[ABORT]** This button aborts the current ExsManager operation. Note that if you are going to abort in the middle of a processing, you will be left with a partially updated library, and while most of the times this is not a real problem, we strongly suggest waiting for end of the processing phase. Aborting while analyzing is never a problem. In all cases, ExsManager will ask a confirmation before actually aborting the current operations .

**[RESET SETTINGS]** This button resets all settings of ExsManager to the default values. The default values are “safe” ones, as they specify a simple relink. No file copy/movement/deletion will be performed with the default settings.

This is the sequence of actions performed by analysis....

# Analysis in advanced mode

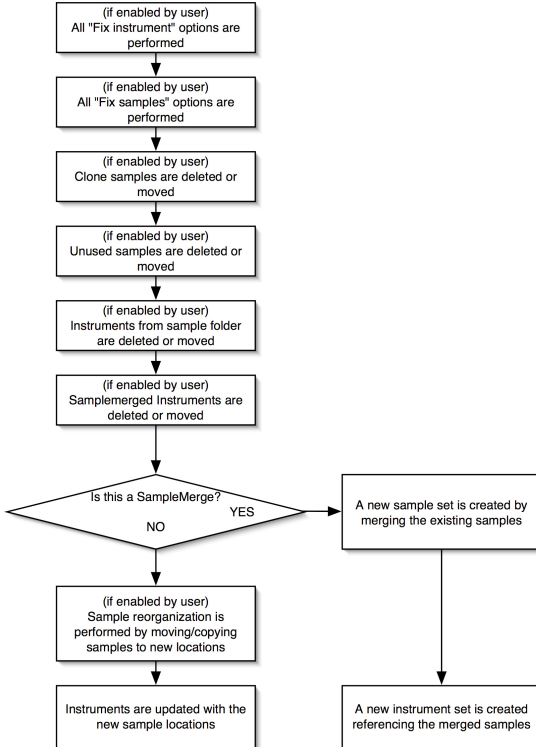
(what happens when you click "Analyze")



...and processing

# Processing in advanced mode

(what happens when you click "Process")





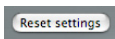


## Example: simple relink

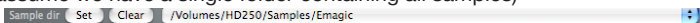
Most of the times we simply want to move the samples from a drive to another and relink the instruments in order to have a responsive set when loading inside Exs24. Well, the default values of ExsManager do exactly that: a simple relink.

This is what we do:

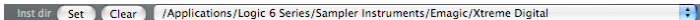
1) switch to advanced mode and click the “reset settings” button. This takes us to “safe” settings, actually a simple relink.



2) set the sample directory where you keep samples (in this example we assume we have a single folder containing all samples)



3) set the instrument directory where you keep the instruments you want to relink



4) click the “analyze” button

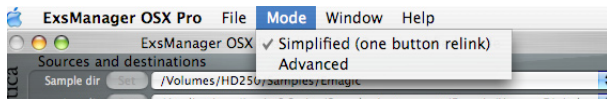


5) click the “process” button



And we have finished.

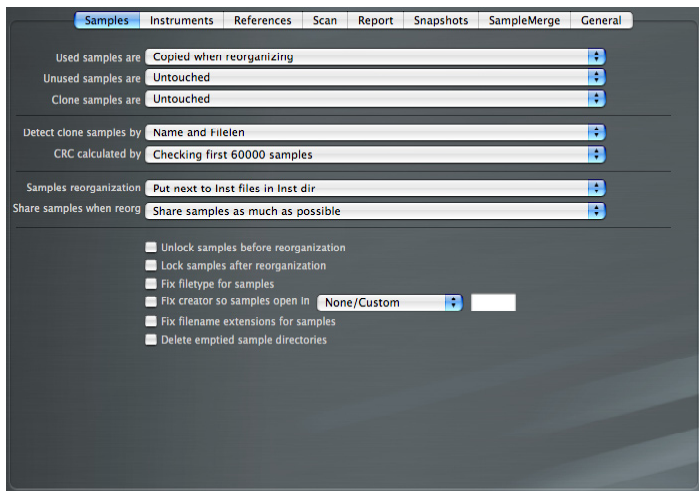
Or we could have used use the simplified mode....

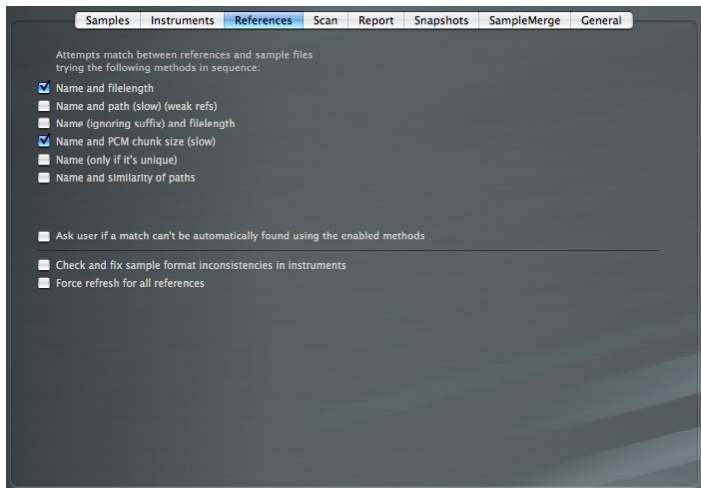
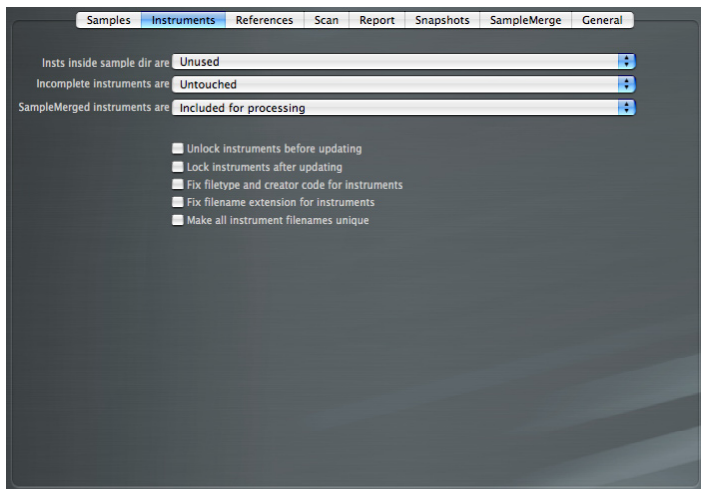


In this case you simply would have set the sample directory and the instrument directory and clicked the “relink” button.

## Example: creation of a backup set

Let's suppose we are doing a backup of some instruments and we want to backup the respective samples too.. So, first we manually copy the instruments with finder to the backup folder (we'll name it "/EXSbackup" as example), then we start ExsManager, set inst dir to /EXSBackup and the sample dir to the dir currently containing the samples. Then we set "Sample reorganization" to "put next to inst", and we also set "used samples are" to 'copied" because we want to keep the original samples where they are, just make a backup of them. Press analyze, process. Done. All the used samples have been copied in a clean, organized way to into /EXSBackup. Here are the settings to use:



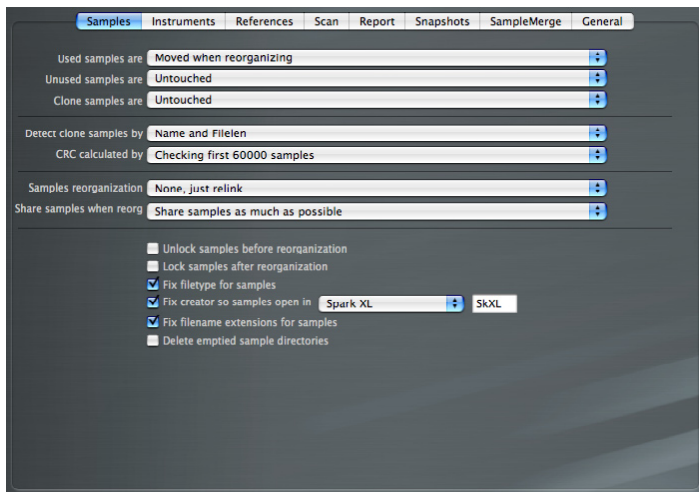


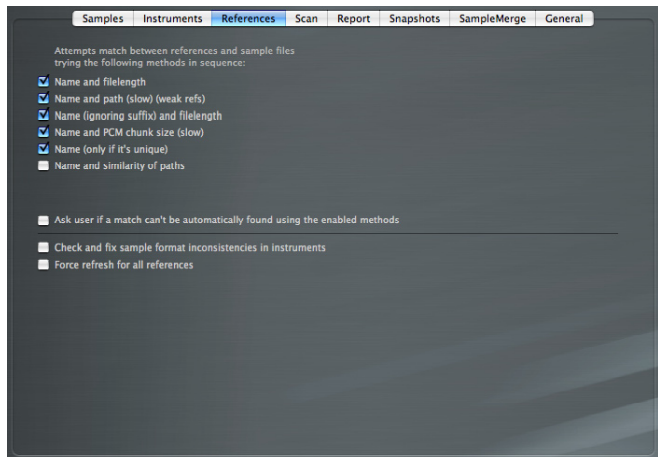
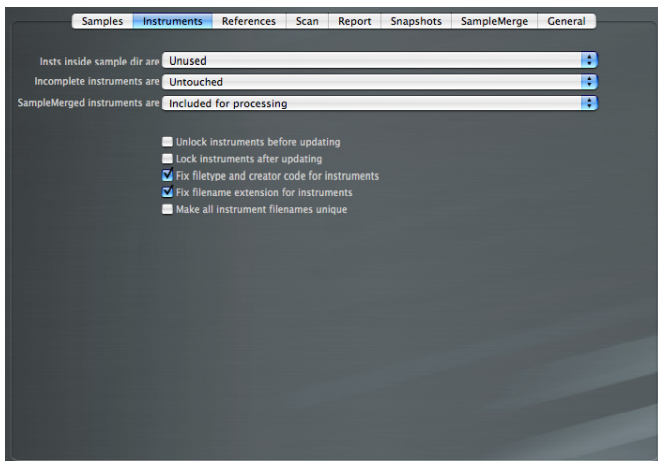
## Example: import from Windows library

Let's suppose we are switching from a Windows system to an OSX one. We want to add our old PC Exs24 library to the current one on the Mac. So, first we copy the PC instrument files to the appropriate location in the logic subdirectory "Sampler instruments", then we copy the PC samples to the samples directory in a newly created PC subdir. Now we just need to relink, but wait... PC audio files all miss the filetype and creator code. Many OSX editors won't open such an audio file. So we will do a relink and also enable the various "fix" options.

Analyze, process. Done

Here are the settings to use:





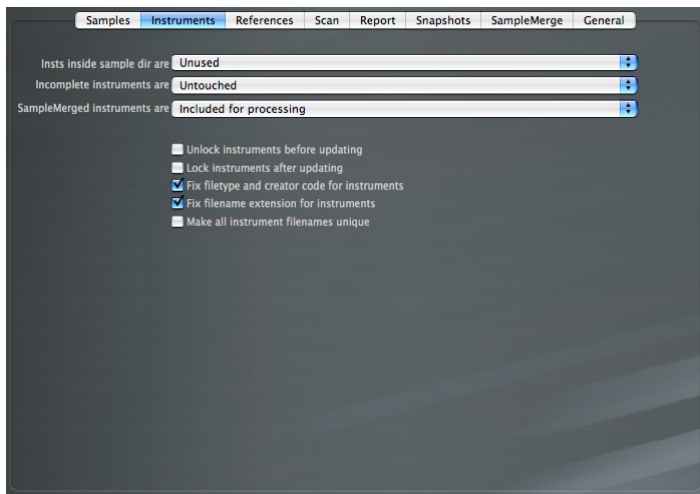
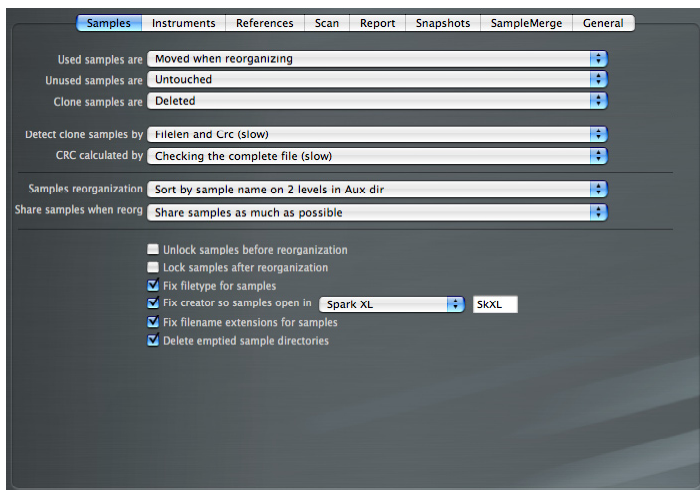
## Example: spring cleaning on hard disk

Let's suppose that everyone in the studio has been messing with the Exs sample files. Copies, copies of copies, copies of copies of copies, directories moved, undisciplined renames etc... Maybe it's time to do a spring cleaning and regain control of the situation on the Hard Disk. So, let's specify a healthy dose of reorganization.

First, we select the instrument directory, then the sample directory. We also set the aux directory to a newly created directory that will contain our reorganized files. Of course we could also set the aux dir to the same dir as the current sample dir. No problem.

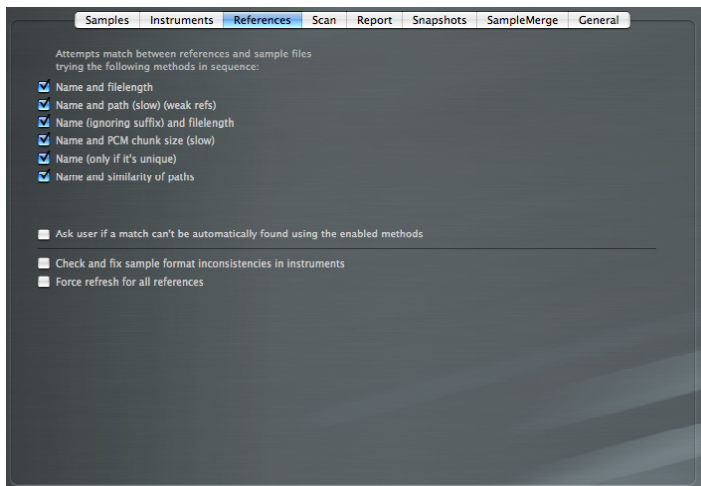
We will reorganize all samples based on a sample name criteria on 2 levels, so we can easily understand where the samples are. We will also delete all clone (duplicate) files, and emptied sample directories. We know for sure that some samples are identical because we copied and renamed them a few weeks ago, but we do not remember how or where, so we set to match clones by use of filelen and full CRC scan, the name being irrelevant. We aren't sure if some samples have been saved by mistake in the instrument directory, so we also check the "include samples from inst dir". We could also delete unused sample files, but we have the strong suspicion those are audio track files used by logic songs, so we leave them untouched.

Analyze, check once again the unused sample files... yes, there are a couple of samples we recognize as audio tracks. So we really left them untouched. We suspect that a client left some PC samples on the HD too, so we decide to "fix" stuff for samples. Ok, now we click process and go take a coffee. When we are back we will find the shiniest Exs24 sample folder on earth.... Here are the settings to use:



(continues...)

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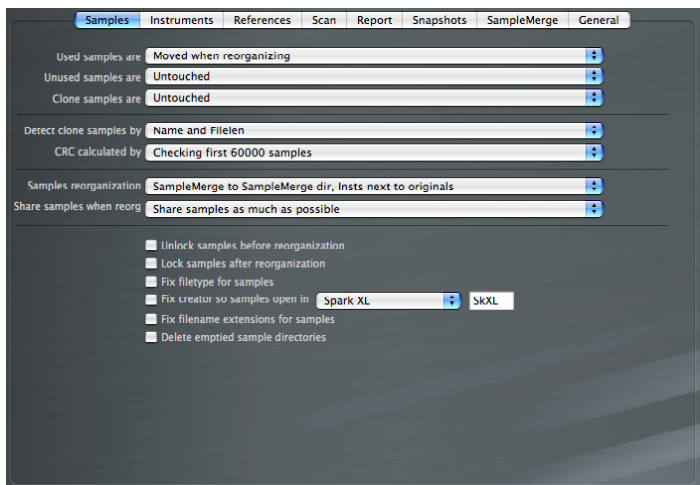




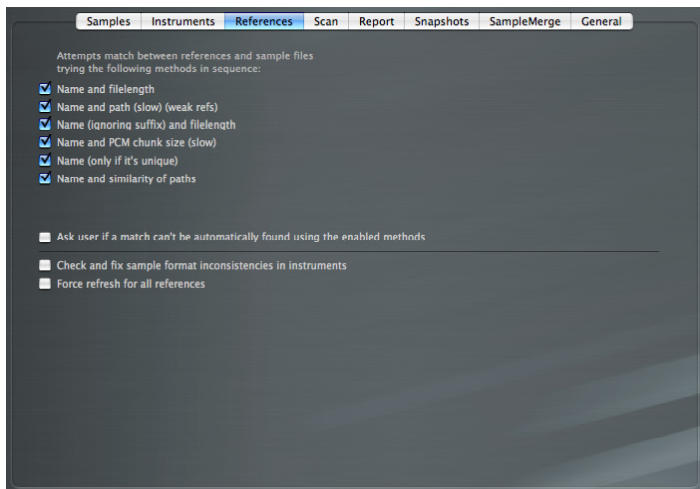
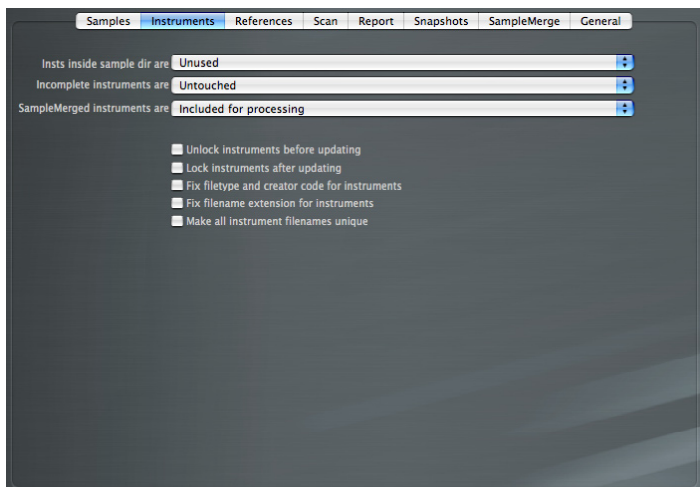
## Example: samplemerging a set

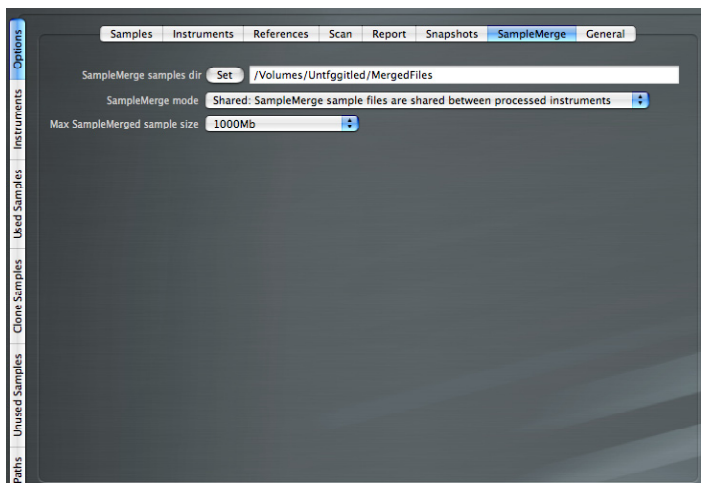
We suddenly found out that we are using too many sample files and Exs24 can't load the viola.exs instrument we urgently need for a new track. It's then time to create a samplemerged set so that we can keep adding more and more instruments to our song. We first select the correct sample and instrument directories. We want to create a set of samplemerged instruments sharing a single sample set, to minimize the additional hard disk usage.

Here are the settings to use... analyze, process, done. At the end of the processing, we will substitute in the song the used instruments with their newly created -MRG counterparts. Now we can load viola-MRG.exs and we can keep adding more and more instruments with no problems.



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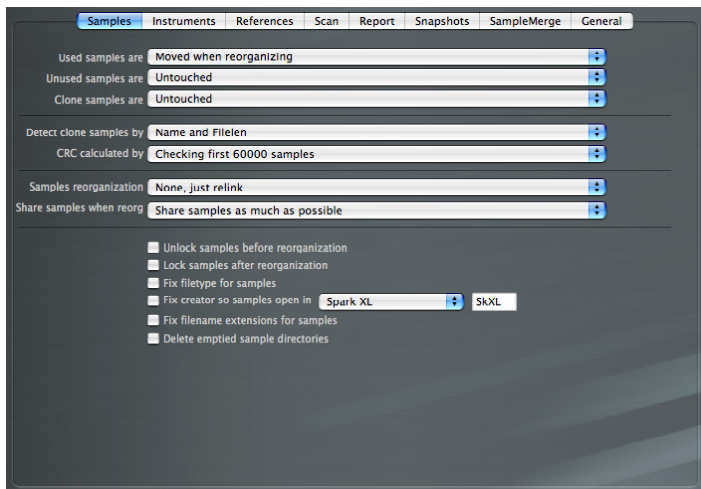


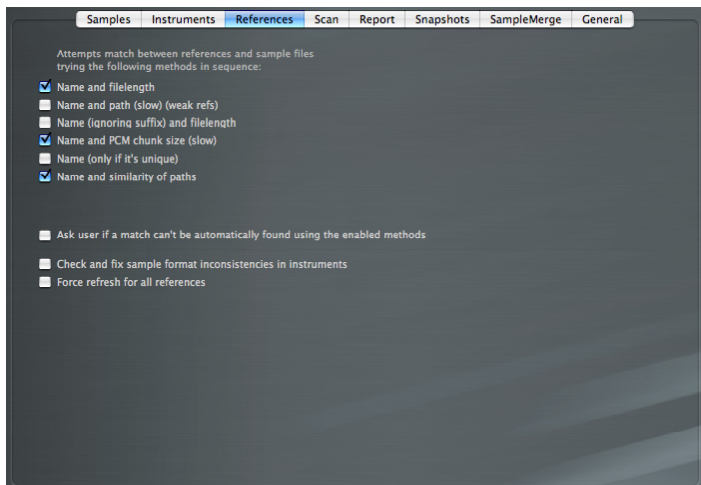
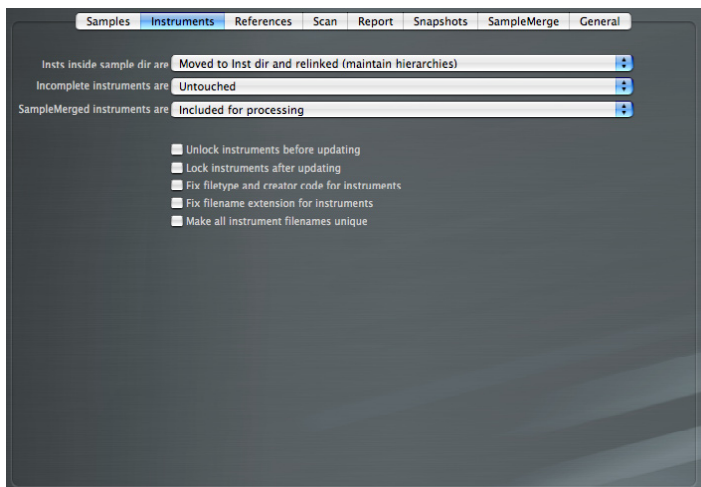
## Example: extracting all instruments out of a directory

Let's suppose we want to extract all instrument files from a certain directory. There's a specific option in ExsManager for moving instruments from the Sample directory to the Instrument directory maintaining directory hierarchies, so we will use that one.

Let's set the Sample directory to the source directory and the Inst directory to the destination directory. The fact that these directories actually contain samples or instruments is irrelevant.

Here are the settings. Note the setting for "Insts inside sample dir are". Analyze, process... done.







## Performance Notes

The program has been designed from start for handling large sets. The specific algorithms adopted ensure that processing time is nearly linear with respect to the number of processed items, and the optimization is such that most of the time ExsManager will have to sit idle waiting for the HD to seek the appropriate file or data. Most mid sized libraries (40/50000 samples) will be relinked in a few minutes. Reorganization on the same HD can take just a few minutes more. Reorganization to a different HD requires instead a physical copy of the sample data, and so it's dependent on the total size of the sample set. But the time of the operation won't be much longer than a normal copy done from finder. Of course if you scan the whole root hierarchy ("/"), lot of time will be wasted checking files that have no relationship to Exs24, so we strongly suggest to spend a few seconds setting the right directories.

The Paths list is a powerful tool as it allows you to specify several paths and then scan them simultaneously if they are on different volumes. So if you have samples spread across several Hds, the appropriate use of Paths will greatly improve scan times.

RAM memory is a very nice resource to EM, so the more you have, the better it is. EM will also work on RAM starved Macs, as it's designed to access memory with a certain well-behaved pattern that is not too heavy on swapping, but the performance will suffer dramatically.

## Program Requirements

- Mac OSX 10.4.3 or later
- 512 MB Ram minimum, 1GB and more recommended
- Power PC G4 and later processors, Intel Core Duo and later processors

## Differences between ExsManager editions

Features	ExsManager Demo	ExsManager Pro
Maximum number of instruments	40	1 million
Maximum number of samples	60000	4 millions
GarageBand compatibility	x	x
Fix instruments options		x
Fix samples options		x
Sample reorganization		x
Snapshot/Restore		x
Rename instruments to unique names		x
Report generation		x
Parallel scanning of volumes		x
SampleMerge process		x



## Custom reorganization modes and features

We are very open to suggestions for implementing new reorganization modes and features. If you feel like you have some good suggestions, write us and we will consider it for public release. If you need a private custom reorganization mode, or some other private custom special features contact us.

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## Thanks to....

We would like to thank our beta testing team for the great feedback and for the patience in testing the software: Ronald Antony, Nick Batzdorf, Raymund Beyer, Sascha Kujawa, Christian Marin, James Ryan, Colin Shapiro, Jochen Schmidt. Special thanks go to Evan Evans for his important contribute in terms of spot-on comments and suggestions. A big hello goes to Antongiulio Frulio, whose enthusiasm is second to no one. Thanks to Paul Linford for the precious comments and document proofreading. Thanks to smoothjazz.com internet radio for the great music. A big thank you to all the great guys at VSL for building the largest and sweetest sample library in the known universe.

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And finally to Emagic, Apple and to Clemens for developing the Exs24.





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