

Seeding Guidelines

Etree.org flows with [TradeFriendly](#) music donated from the community. The long document below takes you through each step of preparing your donation- your *seed*- for proper distribution as [Shorten](#) or [FLAC](#) files. What is covered:

- [Quality Control](#)
- [DAT Transfer or DAE](#)
- Tracking (Aesthetics and Sector Boundaries)
- [NamingStandards](#)
- Compression and Fingerprinting ([\[SHN and MD5\]](#), or [FLAC](#) and [FlacFingerprint](#))
- Info File
- Circulation (uploading, listing in [ShnDatabase](#)) *[this section needs updating, particularly for bittorrent]*

Note: All music circulated through etree.org must be [TradeFriendly](#). Please see [AboutEtreeOrg](#) for why this is crucial. If your seed is not fully permitted to trade, we don't want it.

Quality First

Quality is *very important* to the members of our community. Before you seed a show, please consider this question: **Is this the best possible source?** A copy of a show may circulate to hundreds or thousands of people over time, each of which will spend time and money sharing, burning, and listening to a show - so it's a very bad idea to put an inferior seed into the trading pool. Do some Quality Control:

- Check around for best-available copies within the trading community for your band, and consult available references. Sometimes fans maintain circulation guides, as for [\[Phish\]](#) material.
- Visit the [ShnDatabase](#). This resource lists many performances that have made it into lossless format already. Will yours be an upgrade? Don't just duplicate previous efforts.
- Listen carefully to your show. If there are flaws in your copy, are there flawless sources available? Do a little research into the recording's lineage, contact the person from whom you got it, and make sure that the flaws on your copy are on every copy in that line. If not, you could use a new copy as well!
- Do not start with source material from lossy compression such as mp3, mp4, or aac. It has already lost some frequencies that cannot be regained. Instead, track down the original .wav source from which the .mp3s were made. You might want to do a little [SourceAnalysis](#) on a couple sample tracks of a show to see if what you see is consistent with the type of source you're supposed to have; and to see if the transfer was done properly.

- **Quality is much more important than speed.** Take your time during seed preparation to do a careful job. Don't let all the people begging to get a new show lead you to cut corners - once a quality show is out, they'll forget the wait. The wait is temporary, flaws in a seed last forever.
- Do not seed EAC rips of already existing lossless sources. Adding DAE generations is frowned upon and has potential for loss of quality.
- Alter source text files for existing lossless sources with care. Please do so if you have also made a change to the source itself. You can also update source text files to correct or expand on source/lineage information and track listings.

Transferring Your Seed

section redraft in progress, excuse raggedness

Seeding starts with getting your recording into a format for electronic distribution. This involves "transferring" your material to a computer, changing it to 44.1kHz sample rate for CD if necessary, listening to the audio for a quality check, tracking it for CDs, compressing the audio data into a lossless format ([Shorten](#) or [FLAC](#)), and creating the necessary companion files for your seed, including an informative "info" (txt) file. Recordings are sometimes seeded from burned CDs, in which case the DAT transfer and tracking steps are replaced with a careful digital audio extraction (DAE) step. However, seeding directly from DAT is strongly preferred whenever possible.

If possible, capture and edit the files in 24 bit audio. Save the step of downsampling to 16 bits (required for CD audio) and dithering for the final step. Be sure your audio editor does a proper dither / re-dither!

From Laptop No "transfer" step since recording occurred directly to computer, but recording may have to be downsampled for 44.1kHz audio CD format. References: [\[24-bit FAQ\]](#), [\[laptop-tapers\]](#)

From DAT (*this part needs volunteer writers*)
(Methods for doing a digi-transfer can be written up on a [DatTransfer](#) page linked to here. Volunteers, just go edit that page.)

The folks of (Links to other groups like DAT-Heads, [taperssection.com](#)?) may be able to advise or assist you with the DAT transfer process.

Archival format If you are planning to seed 24-bit archival material directly (perhaps in [FLAC](#) format), check out the detailed [\[24-bit FAQ\]](#).

From Analog Media (reel to reel or cassette tapes)- need pointer or writers- is there a FAQ somewhere?

From an Existing CD

Sometimes it's necessary to seed a recording from an audio CD source. In a common example, the material may have been transferred from DAT directly to a standalone unit. In other cases, the original DAT may be unavailable or unreadable. Seeding a CD-sourced show saves you the

trouble of having to do a tape transfer. However, the DAE process can be tricky and should not be rushed. Here are some DAE tips:

- This [\[DAE FAQ\]](#) gives some background.
- If you are using Windows, the best software available for extracting the audio from a CD is [\[Exact Audio Copy \(EAC\)\]](#). There are [\[EAC Tutorials\]](#) for setting up EAC to do perfect DAE. You need to make sure that EAC uses the proper mode for your drive, and that you use a reliable extraction mode.
- On a UNIX-based system (Linux, BSD, MacOS X, etc.) the [\[CDDA Paranoia \(cdparanoia\)\]](#) program is every bit as good as EAC, but doesn't support the fine-grained offset that EAC does. There is a GUI front end called [\[Grip\]](#) (for the Gnome desktop) and another called [\[Aqua CD Burn\]](#) (for OS X) if you don't particularly like dealing with the command line directly.
- For extra carefulness, extract each track more than once, then do a file comparison between the replicate .wav files. If your extraction technique is sound, the files will match.

Extracting a CD with one of these reliable tools will usually take a long time, but the extra time is worth it to ensure you seed the highest quality version of the recording.

Tracking the Seed for CD

Aesthetics

You should arrange your seed into tracks in a way that gives a pleasant listening experience. "Buzzkill" careless tracking of seeds is a common complaint from listeners; a little extra thought brings a lot of happiness. If the recording came from a DAT, you'll now need to track it for audio CDs from scratch. If you're seeding from a previous CD, you can optimize the tracking at this point, if necessary. Here are some tracking tips:

- Place inter-disc cuts at a quiet spot in the performance (preferably at a set break, or at a pause between songs) and not in the middle of a killer jam. This sometimes means leaving a disc only partially filled so that all the segues are together on a disc. It's more important to have the music hang together cohesively than to have totally-full CDs. Discs are relatively cheap.
- Find appropriate places in the performance so that it will fit on standard 74-minute CDs. 80-minute discs are plentiful and widely available now, but not everyone uses them. If you want to keep everyone happy, try to keep the discs to 74 minutes or less. (Though at this point, this is far less an issue than it once was, especially if it means fitting a show on one less disc.)
- If crowd noise or a spoken story is present between tracks, track it so the crowd noise is at the end of one tune, not at the beginning of the next. (If it's a really long story, consider tracking it as a separate track.) This way, eager listeners can skip right to the beginning of a song instead of waiting through some cheering. However, if there is a short kick-off or an introduction to a song, consider putting it at the beginning of the track. Don't cut off any musical notes at the beginning of a song, even if there's talking or intro over them.

Tracking at Sector Boundaries

Paying attention to a simple technical issue during tracking can make a noticeable difference in seed quality. Each track of a standard audio CD is composed of "sectors" or "frames" that are each 1/75 second long (also expressed as 2352 bytes or 588 samples long). If a track is properly cut on a multiple of 1/75 second, it is "sector aligned", or cut "along sector boundaries." When it is not properly cut, the last sector is like a ragged end, which CD burning software just fills in with silence. Listeners will hear a click or pop between tracks because of the music -> sub-second silence -> music transition. This is **extremely** annoying and easily avoidable. Here are some sector boundary tips:

- To avoid *sector boundary errors* (SBEs), just use the right tool in the right way to do your track splits. The simplest and best tool for tracking a show is [\[CD Wave\]](#), for Windows. The program's sole purpose is to split .wav files into proper CD sector-aligned tracks. The interface is very simple and easy to use. CDWave does not delete your original wav file; instead, it generates a separate set of tracks. Also, you can save a cue sheet with the split points for the tracks. This allows you to generate a set of split tracks and see how you like them, and if you decide to make changes you can go back and generate a new set of tracks from the original long wav file.
- Most audio editing programs (e.g., Sound Forge, Cool Edit, etc.) do **not** automatically cut files along sector boundaries. Either change their settings to force them to split .wav files correctly (to cut on a 1/75th second CD sector boundary), or avoid them for CD tracking.
- For the Mac, there is no direct equivalent of CD Wave. Dave Mallick notes, "[\[SoundEdit 16\]](#) is quite capable of splitting a transferred DAT into tracks. Just set ruler units to frames, set 1 second = 75 frames, and have at it. As long as you enter a whole frame value into your selection box, you get perfect sector boundary cuts every time." This is also the case for [\[Felt Tip Sound Studio\]](#).
- Do any editing or "mastering" **before** doing your track splits. Never add fades or edits to .wav files after you track them. Doing so can push them out of alignment.
- An easy way of checking for sector boundary errors is by use of [\[shntool\]](#)'s len function. If you see a -b- flag next to the listing, that indicates a boundary error. For more discussion of how to detect and repair SBEs and seek tables using shntool and shorten (with command lines or batch files), see [\[this etree forums thread\]](#).
- For Linux (UNIX), there is a program called [\[wavbreaker\]](#) that will allow tracking on correct sector boundaries.
- For Unix, there are two programs called [\[cdrdao\]](#) and [\[gcdmaster\]](#) for tracking CDs. gcdmaster comes in handy because writing toc/cue files for cdrdao with a text editor, by hand, is usually slightly boring at best and frustratingly tedious at worst.
- If you are reseeded, recent versions of [\[FlacFrontend\]](#) have a working "align on sector boundaries" feature which can repair improperly cut files.
- SBEs will sound louder or softer depending on the CD player. They may be very loud and annoying for some listeners, even if they are not noticeable on your own system.
- For an example of strong feelings on the SBE issue, and more description, see [\[SectorBoundaryDiscussion\]](#).

More Quality Control

After you've done your DAT transfer or DAE, you should listen to the resulting audio files on disc or on your computer to ensure they are clean. There should be no clicks or pops that don't exist on the source media, and the overall sound quality should be the same as the copy you're working from.

Please take the time to listen to at least some of the material you transferred (*e.g.*, a sample from each DAT or CD). Ideally, listen to your recording in its entirety. If it's a killer show, you probably want to hear it again anyway :-)

File Naming

Name your new .wav files according to etree.org's basic [NamingStandards](#). They will now be ready for compression into a lossless format, either [FLAC](#) or [Shorten](#). Typical compression tools will take the names of the new .flac or .shn files directly from the names of your .wavs.

Some handy tools for renaming files are [\[Flexible Renamer\]](#), [\[Flash Renamer\]](#), [\[THE Rename\]](#) (Windows free/shareware). Be careful not to rename all the files on your hard drive accidentally, though!

Compression and Fingerprinting

The audio .wav data you have created should next be compressed into a lossless format. Compressed files will be easier and faster for people to transfer around, and to store as archives. Currently, etree.org uses either [FLAC](#) or [Shorten](#). If you use one, it's easy to understand the other. However, flac is under active development, while shn and (more importantly) the tools for using shn files are not being kept up to date.

FLAC (*volunteer writers needed for this section*)

[FLAC](#) though newer to etree.org, is a proven and more modern format, with several important advantages over Shorten. Tools available for compression to .flac are listed on the [FLAC](#) page.

You are strongly encouraged to add tags (also known as [FlacMetadata](#)) to the files. Unlike shn, but like most other modern compression formats, flac has a section of the file which stores information about the file. The comment field allows you to identify lots of information about the show, gear, encoder, etc. That means no more mystery files or versions! The track name and number is used in many flac players (both hardware and software players).

Place the .flac files you create into a new directory that conforms to our [NamingStandards](#). (If multiple tapes circulate per date, consider [ExtendedNamingStandards](#) for the top directory).

You should create a [FlacFingerprint](#) (ffp.txt) file for your .flac set, using [NamingStandards](#). This file will help future traders identify which flac set they have for a given show date. See the [FLAC](#) page for software links; the [FlacFrontend](#) program can generate a fingerprint file, for

example.

(Side note: Whether to include whole-file .md5 fingerprints as well is [\[a topic of debate\]](#). Although whole-file .md5s are [\[formally discouraged\]](#) at etree.org, they can be useful in other venues such as the [\[Live Music Archive\]](#) (more specific link at the site to be prepared soon).)

Mike Wren wrote, a long time ago now: "We still need someone to write up a seeding standard for 24bit audio (how do we track, how do we archive for DVD-A support, etc.). I'll be bugging people about this --MW"

Shorten

[Shorten](#) had been etree.org's preferred audio compression method for several years, and many traders are quite comfortable with it. A number of tools are available for compression to .shn. See the [\[Small SHN and MD5 FAQ\]](#) or the [\[etree.org software page\]](#) for choices that work on your computer platform.

Some, but not all, Shorten tools include the option to make the .shn files "seekable" during direct play, by appending an extra table of seeking data to each file. See the [\[Small SHN and MD5 FAQ\]](#) and etree.org's [\[Seeking FAQ\]](#) for more info. Your compressing with the seek-appended option will be appreciated by those listeners who use their computers as .shn "listening stations."

When you are finished, place the .shn files you create into a new directory that conforms to our [NamingStandards](#). If your band is widely taped and multiple sources circulate per date, consider [ExtendedNamingStandards](#) for the top directory.

Important: After you have prepared your .shn files, generate .md5 file(s) that contain checksums for each of them. These checksums are *essential* for people to check for .shn file corruption after a download, and to help future traders identify which shn set they have for a given show date. More information about .md5s and tools to create them (often bundled with a Shorten tool) are listed in the [\[Small SHN and MD5 FAQ\]](#). Name the .md5 file(s) according to our [NamingStandards](#) and place them in the same directory with the .shn files (they will probably already be there on creation).

Within your new .md5 file(s), there should be checksum lines corresponding to all of the .flac or .shn files you are seeding, and *only* lines for those. Depending on the md5-making program you used, if you had other files (such as a .txt file) next to your music files when you generated your .md5, then you may have checksum line(s) for the other file(s) too. Please remove other unwanted lines from your .md5 file if necessary, by opening, editing and saving it in a text editor such as Notepad. Any other checksum lines will only cause confusion later.

Optionally, you can also generate .md5 file(s) for your original wav files. This provides an extra level of quality control for others. [\[Md5summer\]](#) is an easy Windows tool for this purpose. Name the .md5 file(s) according to our [NamingStandards](#) and place them in the same directory with the .shn files.

Creating an Info File

An info file is a plain .txt file that tells people about your seed. Often it's the only thing a potential listener has to help him decide whether or not to download or trade for your fileset versus another fileset. Since downloading and trading take time and effort, the more details you can give, the more you will help the decision. Here are some info file tips:

- Create a new file in a text-viewing program (like Notepad, Wordpad, Windows, etc) and start typing and/or pasting from your reference material. Include info as directed below. When done, save as **plain text**, not a fancier format like .doc, so that anyone can read the file on their own platform.
- There are examples of *good* info files with typical information on these pages: [\[1\]](#), [\[2\]](#), [\[3\]](#), [\[4\]](#), [\[5\]](#). (Bonus example FLAC seed: [\[6\]](#).)
- Include the band name, date and venue.
- **Include source information that is as complete as possible:** full genealogy, DAT transfer method, etc. This greatly helps the many people who know how to interpret source info. In contrast, having very sketchy info will cause many traders to shun your seed. Feel free to ask your trading partner for more info, or his trading partner...
- Include a track listing with disc and track numbering, song titles, and ideally track timings as well. If you don't know the song title, leave a ? next to the track number- someone may be able to fill it in later.
- Add track and disc timings to help people decide what length disc to use (74 vs 80 min), whether or not to move songs between discs to their taste, whether to add filler, whether to use one of your tracks as filler, etc. This super-useful [\[track length program\]](#) will pull the timing info right from an audio disc copy and make a starter text file at the same time; it's available for Windows.
- Add any observations and notes. Point out flaws or splices, and any need for 80 min discs. People appreciate being forewarned.
- Feel free to give credit to others, especially the generous taper(s) who made the recording (unless they wish to remain anonymous).
- Take credit (and responsibility) yourself. If you produce good seeds, people will look out for your name in the info file, as a mark of quality. Add your email address if you like, so you can help address any problems that might come up.
- Do NOT place restrictions on what people can do with your fileset. Once you release it, it's in the public domain, subject only to the band's trading policy. Not only are "restrictions" like "Do not convert to .mp3" and "Do not remaster" completely unenforceable, but they are obnoxious, impractical and go against the spirit of the etree community.

Name the .txt file according to our [NamingStandards](#) and place it in the same directory with the other files. Within the directory you made, you now have a complete "shn set" or "flac set."

Circulating Your Seed

Use the mechanisms of etree.org to publicize and distribute your fine new [TradeFriendly](#) seed. The usual etree.org method is to let ftp [SiteOps](#) know about your seed, then arrange to upload the files to the interested ones. Here are some circulation tips:

- [\[BitTorrent\]](#) has become a very popular and effective way to circulate shows. It requires access to a broadband connection.
- If the band is one of those who have given permission for hosting in the [\[Live Music Archive\]](#) section of the [\[Internet Archive\]](#), you can directly send your seed via ftp. OK'd bands are listed in bold on the [\[Band Information Page\]](#) there and "Arrange an Upload" instructions are linked from the [\[main LMA page\]](#).
- **this method may be dead:** For any [TradeFriendly](#) band's show, email an announcement with your info file pasted into it, to <mailto:seed@etree.org>. It must be a plain-text message, no html or attachments, or it won't get through (with no bounce warning given). Format the subject line as "SEED: Bandname Date". The message will go to the server team, who will pass it on to the siteops list, a group of people with higher-bandwidth ftp servers. Interested siteops will get in touch with you about an upload. If you don't hear back from anyone, your message may not have gotten through or the team may not have attended to it yet.
- Alternatively, subscribe to etrade (see [MailingLists](#)), then email an announcement with your info file pasted into it, to <mailto:ettrade@etree.org>. This will directly reach lower-bandwidth ftp siteops, who will get in touch with you about an upload. However, uploading may take longer and circulation may not be as effective via the low-bandwidth sites compared to bigger sites.
- Alternatively, post a seeding announcement to the [\[New Seeds\]](#) forum in the [\[etree.org forums\]](#).
- A siteop who contacts you will provide the site name or number, login name and password for ftp upload. Send your seed- its directory plus everything inside- using your favorite ftp program. If you run into a problem at any point, email the siteop to give a heads up and to troubleshoot. The siteop needs your whole, uncorrupted seed.
- If you get too many replies to upload to everyone, feel free to put the siteops in contact so that they can "mirror" from each other.
- If you become a regular uploader, you will typically end up with priority access to many ftp sites.
- If you have bandwidth limitations (such as a phone modem), you can always send data discs carrying your seed through the regular postal mail. You can arrange to send them to a siteop or to someone who can help upload to a site.
- Arrange to list your new seed in the [ShnDatabase](#). Many traders use this resource to see to what [TradeFriendly](#) shn sets are out there. You can either [\[autosubmit\]](#) the info through a web form (see [\[SubmitShnInfo documentation page\]](#) for help), or email the info file and md5s to the shn admin(s) for your band (their contact info is typically listed at the top or bottom of the by-year shn tables for the band). Note flac sets are now covered in the tables too.

If There Are Problems

Sometimes there is a problem with your seed that is not detected until you've put it into circulation. For example, a .shn file may have gotten corrupted during your initial upload or even (rarely) during your compression step. There may have been a mistake during DAT transfer. In

some cases, other etree.org members can fix minor errors and reissue your seed as a fixed copy. In other cases, *you* are the best or only person who can fix the problem. If necessary, please give the problem that extra bit of your attention, so that your overall effort of seeding won't go to waste.

Accept Thanks!

We appreciate your generosity! :)

See also: [NamingStandards](#), [ExtendedNamingStandards](#), [BandAbbreviations](#), [BandAbbreviationGuidelines](#)

keywords for search: seeding guidelines

This Page Last Changed: Apr 29, 2007 07:25:08

[Edit this page](#) · [View page history](#)

All content written by members of the etree.org community, for the etree.org community.
© 1998-2007, All Rights Reserved.