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Preparing Cues For Mixing

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Introduction:

The purpose of this guide is to outline the details of what needs to be delivered to your mixing team for each cue that is to be mixed. In addition to a description of the required elements to be provided, this guide also outlines technical and organizational guidelines so that there is a minimal level of confusion and technical issues at the mix.

As certain sections do get very specific, it is wise to bear in mind that many of the guidelines described here are suggestions and may not be appropriate or necessary for your project. It is always important to initiate and maintain clear and consistent communication with the mixing team so that everything needed is organized and delivered in a clear and consistent fashion. If this guide was not provided to you by your mixing team, please share and review it with them so that all necessary details can be confirmed before mix preparations begin.

Regardless of the technical and organizational details required for your project, it is always essential that consistency and attention to detail be maintained. It is likely that you or your employer are paying the mixing team by the day or by the hour so it is most economical to not waste any of that valuable time fixing technical problems or clearing unnecessary confusion. Minimizing technical issues and confusion makes everyone's life easier, especially yours.

If you're in a pinch time wise, feel free to skip to the very end of this guide where I've provided a checklist of things to prepare and check before sending things off to a mix.

I. Splits & Elements To Deliver

In this section, you will find that I have laid out what splits are needed from each musical section of each cue. For each musical section, I have laid out an "ideal" level of splits and a "minimum" level of splits.

Regardless of the level of splits, each cue should always include a stereo reference mix or "2mix", a printed click track, and an exported MIDI file of the cue that contains the tempo and meter grid information.

In an ideal world, every cue that is to be delivered to a mixer for a score mix would have every element exported or printed to it's own audio file for the mix. This is what is typically called a Full Synthmaster. This does not necessarily mean that every patch in a sequence must be separated per se as similar instruments that make up a particular element can and should be combined for the mix. For example, if the sequence utilizes several string sample libraries to produce the overall string sound, those should be exported together so that the different string parts are isolated for the mix but are not excessively split. If there is ever any hesitation with combining elements, it is always safer to split elements out wider so delivering each patch as a separate audio file isn't always ideal but would be completely acceptable.

All that being said, sometimes it is not practical or possible for you and your team to prepare Full Synthmasters for every cue so a certain level of summing can be done as cues are being prepared for the mix. If that happens to be the case, I've described a bare minimum level of separation that is required from each musical section of each cue.

Do also note the order and grouping of each section of elements described below. This is the preferred order of tracks in the Pro Tools session if one is to be prepared for the mix.

Strings:

Minimum:

Strings Long
Strings Short
Aleatory

Ideal:

Violins I Long
Violins II Long
Viola Long
Celli Long
Basses Long

Violins I Short
Violins II Short
Viola Short
Celli Short
Basses Short

Note: The primary String elements can also be combined into "High" and "Low" splits if the MIDI was not organized into orchestral sections.

Harmonics *(could be split out by orchestral section or combined)*

Aleatoric Pads
Aleatoric Hits & Stings

Brass:

Minimum:

Brass Long
Brass Short

Ideal:

Horns
Trumpets
Trombones
Bass Trombones
Tuba
Cimbasso

Note: As with the Strings, if the MIDI is not split into each orchestral section, a "High" and "Low" split will be acceptable. It is also optional to split Brass into "Long" and "Short" elements as often the sample libraries are less clearly organized into these elements.

Woodwinds:

Minimum:

Woodwinds High
Woodwinds Low

Ideal:

Flutes
Oboes
English Horn
Clarinets
Bassoons

Note: The same guidelines to splitting Brass elements apply here. Long and Short splits are optional depending on the sequence and programming techniques utilized.

Choir:

Minimum:

Choir Long
Choir Short

Ideal:

Soprano (Long/Short separate)
Alto (Long/Short separate)
Tenor (Long/Short separate)
Bass (Long/Short separate)

Choir Effects *(Shouts, Tuvan Voices, Rises, Aleatory, Etc.)*

Note: As with Strings and Brass, the level of splits is flexible depending on how many patches are utilized and how they are programmed.

Bells-Harp:

Minimum:

Bells *(Chimes, Glock, Marimba, Etc.)*
Harp

Ideal:

Harp
Chimes
Glock
Marimba
Vibes
Celeste
Etc.

Percussion:

Minimum:

Orch Perc
Ethnic Perc *(Taikos, Surdos, Bongos, Etc.)*
Cont Perc *(Electronic Perc Grooves & heavily processed Percussion)*
Tickers *(Puilli Sticks, Shakers, High Timekeepers, Etc.)*
Drum Kit

Ideal:

Timpani
Gran Casa/Bass Drum
Orchestral Toms

All Other Elements Split Accordingly

Note: Although having every element printed separately is ideal, there is flexibility with how wide percussion elements are split out. As long as the minimum splits are provided, additional splits can be printed as necessary on a cue-by-cue basis if it is not practical to provide full splits for every cue.

In the event that there is a sequenced Drum Kit, the following splits would be ideal:

Kick
Snare
Tom 1
Tom 2
Tom 3
Etc.
High Hat
Overheads
Room

Synths:

Minimum:

Synth Pads
Synth Arps
Synth Bass *(Synth Bass doubling Low Strings, Low Synth Arps, Any Element that functions as an Electric Bass in a song would)*

Ideal:

Each Synth Element Split

Note: The same guidelines to Perc apply here. As long as the minimum splits are provided, further splits can be provided on a cue-by-cue basis if it is not practical to split every Synth element for every cue.

Other Elements:

Any element not described above should be split out.

This includes:

Solo Vocals
Guitars *(Acoustics, Electrics, and Parts split)*
Other Plucked Instruments *(e.g., George Doering)*
Solo Elements
Fun Things I've Never Heard Of

II. File Length, Levels, Effects, & Format

File Length:

When printing or exporting each element, every Audio File should begin at Bar 1, Beat 1 of the sequence, down to the exact sample. It should always be possible to grab any element and place it at Bar 1, Beat 1 of the mix session and it will be in sync. Therefore, every Audio File delivered to the mix should start at the same place so that lining up the start of all Audio Files will result in everything being in sync.

This is especially crucial if a Pro Tools session is not to be prepared for the mix before delivering the cue. This will allow the engineering team to simply place or "spot" all of the Audio Files for a cue to the same start time (Bar 1, Beat 1) and everything will play in sync.

Ideally, in addition to starting in the exact same place, every Audio File should be the exact same length but if the end of the file length for each Audio File ends after the element ends that will be acceptable.

Levels:

As far as levels go, the primary concern is that no element is clipped or distorted. This is very difficult to fix in the mixing stage and wastes valuable time.

Conversely, the level of some elements might also be unusually low so sound judgment should be used as elements are prepared so that there is a usable audio level printed for each element. This is of course rather subjective but a good guideline is to notice if there is appropriate level variance on the meter for each element in relation to the dynamics of the element.

If you end up needing to drastically adjust the level of an element up or down, it might be wise to note that to the mixing team so that we know that something has been significantly adjusted from where it was in the composer's reference mix.

Effects:

When printing or exporting each element, all Reverbs should be muted or deactivated so that each element is delivered to the mix dry. Occasionally, it is acceptable to print certain Reverbs for the mix if the Reverb is a very specific "creative" Reverb that would be difficult to mimic or recreate in the mix.

As for any other effects, generally it's best to print any special effects into each element such as Flangers, Chorusing, Panners, Distortion, etc. If the mix is to be in stereo, Delays usually can be left on but for a surround mix it's often good to provide elements without Delay but with a note to the mixer as to what delay should be used. This allows the mixer to add delays in a surround format or placement separate from the dry element.

As always, if there is ever any uncertainty, it's wise to contact the mixer or the assistant mixer to ask what they would like to be printed. Sometimes certain elements are best delivered both dry and with effects as a reference for the mix.

Format:

The majority of score mixes are run at 48k, 24 bit, WAV so in general that is the format that all Audio Files should be delivered as. There are times when different sample rates will be utilized or sometimes the "prelay" elements will be mixed from a dedicated Pro Tools rig so the appropriate format should be confirmed with the mixing team before preparing any elements for the mix.

III. Naming Convention

When naming Folders, Audio Files, MIDI files, or any other elements to be delivered to the mix, the most important aspect is consistency. This results in the least amount of confusion when organizing files and cues during the mix.

Having seen a wide variety of naming conventions, the following naming convention is what I find to be the clearest:

[Showcode] [Cue Number] [Version Number] [Picture Version] [Element Name]

So, for example, the "Strings Long" Audio File for the example cue used in this guide would be labeled as such:

LHF 2m16 v2.2 c0813 Strings Long.wav

The version number listed in each element should always match the version number labeled in the sequence for the cue so that we can be certain that each element was derived from the version of the cue that is to be mixed. If an additional print or export is to be made to fix any technical issues or to provide wider splits for the mix, the version number should **NOT** be changed so that there isn't any confusion that there is a newer version of the cue that needs to be mixed. Simply add the word "fix" or "clean print" or some sort of descriptor to the end of the file name to describe what the element is and what might have changed if it is an element that was previously delivered.

The picture version is an optional aspect of the naming convention as sometimes only one cut of picture is going to be used at the mix. If a variety of different picture cuts are to be used during the mix, it is very useful to have the corresponding version of picture in the filename for each cue so there is no confusion as to which version of picture should be used for each cue at the mix. The specific naming convention of the cut should of course match the date or version number in the filename of the picture file.

IV. Folder Structure

As each cue is prepared for the mix, elements should be organized into a separate folder for each cue. Then each folder containing the elements to be delivered for a mix should be organized into a single folder containing all of the cues. Below is an example of what this folder should eventually look like:

Name	▲	Date Modified	Size	Kind
▶ 📁 LHF 1m00 v1.1 Synthmaster		Today, 4:28 PM	--	Folder
▶ 📁 LHF 1m01 v2.7 Synthmaster		Today, 1:59 PM	--	Folder
▶ 📁 LHF 1m03 v3.4 Synthmaster		Today, 1:59 PM	--	Folder
▶ 📁 LHF 1m04 v2.3 Synthmaster		Today, 1:59 PM	--	Folder
▶ 📁 LHF 1m05 v1.4 Synthmaster		Today, 2:00 PM	--	Folder
▶ 📁 LHF 1m06 v2.1 Synthmaster		Today, 2:00 PM	--	Folder
▶ 📁 LHF 1m07 v2.1 Synthmaster		Today, 2:00 PM	--	Folder
▶ 📁 LHF 1m08 v2.1 Synthmaster		Today, 2:00 PM	--	Folder
▶ 📁 LHF 1m09 v1.1 Synthmaster		Today, 2:00 PM	--	Folder
▶ 📁 LHF 2m10 v2.2 Synthmaster		Today, 2:00 PM	--	Folder
▶ 📁 LHF 2m11 v1.1 Synthmaster		Today, 2:00 PM	--	Folder
▶ 📁 LHF 2m12 v1.3 Synthmaster		Today, 2:01 PM	--	Folder
▶ 📁 LHF 2m13 v1.8 Synthmaster		Today, 2:01 PM	--	Folder
▶ 📁 LHF 2m14 v2.3 Synthmaster		Today, 2:01 PM	--	Folder
▶ 📁 LHF 2m15 v3.1 Synthmaster		Today, 2:01 PM	--	Folder
▶ 📁 LHF 2m16 v2.2 Synthmaster		Today, 4:46 PM	--	Folder
▶ 📁 LHF 3m17A v1.7 Synthmaster		Today, 2:01 PM	--	Folder
▶ 📁 LHF 3m17B v1.4 Synthmaster		Today, 2:01 PM	--	Folder
▶ 📁 LHF 3m18 v2.3 Synthmaster		Today, 2:01 PM	--	Folder
▶ 📁 LHF 3m20 v2.2 Synthmaster		Today, 2:01 PM	--	Folder
▶ 📁 LHF 3m21 v1.3 Synthmaster		Today, 2:02 PM	--	Folder
▶ 📁 LHF 3m22 v1.5 Synthmaster		Today, 2:02 PM	--	Folder
▶ 📁 LHF 4m23 v1.7 Synthmaster		Today, 2:42 PM	--	Folder
▶ 📁 LHF 4m24 v2.1 Synthmaster		Today, 2:42 PM	--	Folder
▶ 📁 LHF 4m25 v2.1 Synthmaster		Today, 4:24 PM	--	Folder
▶ 📁 LHF 4m26 v1.3 Synthmaster		Today, 4:24 PM	--	Folder
▶ 📁 LHF 4m27 v2.2 Synthmaster		Today, 4:25 PM	--	Folder
▶ 📁 LHF 4m28 v1.5 Synthmaster		Today, 4:25 PM	--	Folder
▶ 📁 LHF 4m29 v1.4 Synthmaster		Today, 4:25 PM	--	Folder
▶ 📁 LHF 4m30 v2.1 Synthmaster		Today, 4:25 PM	--	Folder
▶ 📁 LHF 4m31 v2.1 Synthmaster		Today, 4:25 PM	--	Folder
▶ 📁 LHF 5m33–35 v2.1 Synthmaster		Today, 4:26 PM	--	Folder
▶ 📁 LHF 5m36–40 v2.1 Synthmaster		Today, 4:26 PM	--	Folder
▶ 📁 LHF 5m41 v2.1 Synthmaster		Today, 4:26 PM	--	Folder
▶ 📁 LHF 6m42 v1.6 Synthmaster		Today, 4:26 PM	--	Folder
▶ 📁 LHF 6m43 v2.3 Alt Synthmaster		Today, 4:26 PM	--	Folder
▶ 📁 LHF 6m43 v2.3 Synthmaster		Today, 4:26 PM	--	Folder
▶ 📁 LHF 6m44 v1.4 Synthmaster		Today, 4:27 PM	--	Folder
▶ 📁 LHF 6m45 v1.3 Synthmaster		Today, 4:27 PM	--	Folder
▶ 📁 LHF 6m46 v1.1 Synthmaster		Today, 4:27 PM	--	Folder
▶ 📁 LHF 6m47A v2.4 Synthmaster		Today, 4:27 PM	--	Folder
▶ 📁 LHF 6m47B v1.3 Synthmaster		Today, 4:27 PM	--	Folder
▶ 📁 LHF 6m48 v1.2 Synthmaster		Today, 4:28 PM	--	Folder

As you can see, each folder is labeled using the same naming convention and is very clear.

Within each folder, there are 2 scenarios as to how things should be laid out, depending on whether or not you will be preparing a Pro Tools session for the mix.

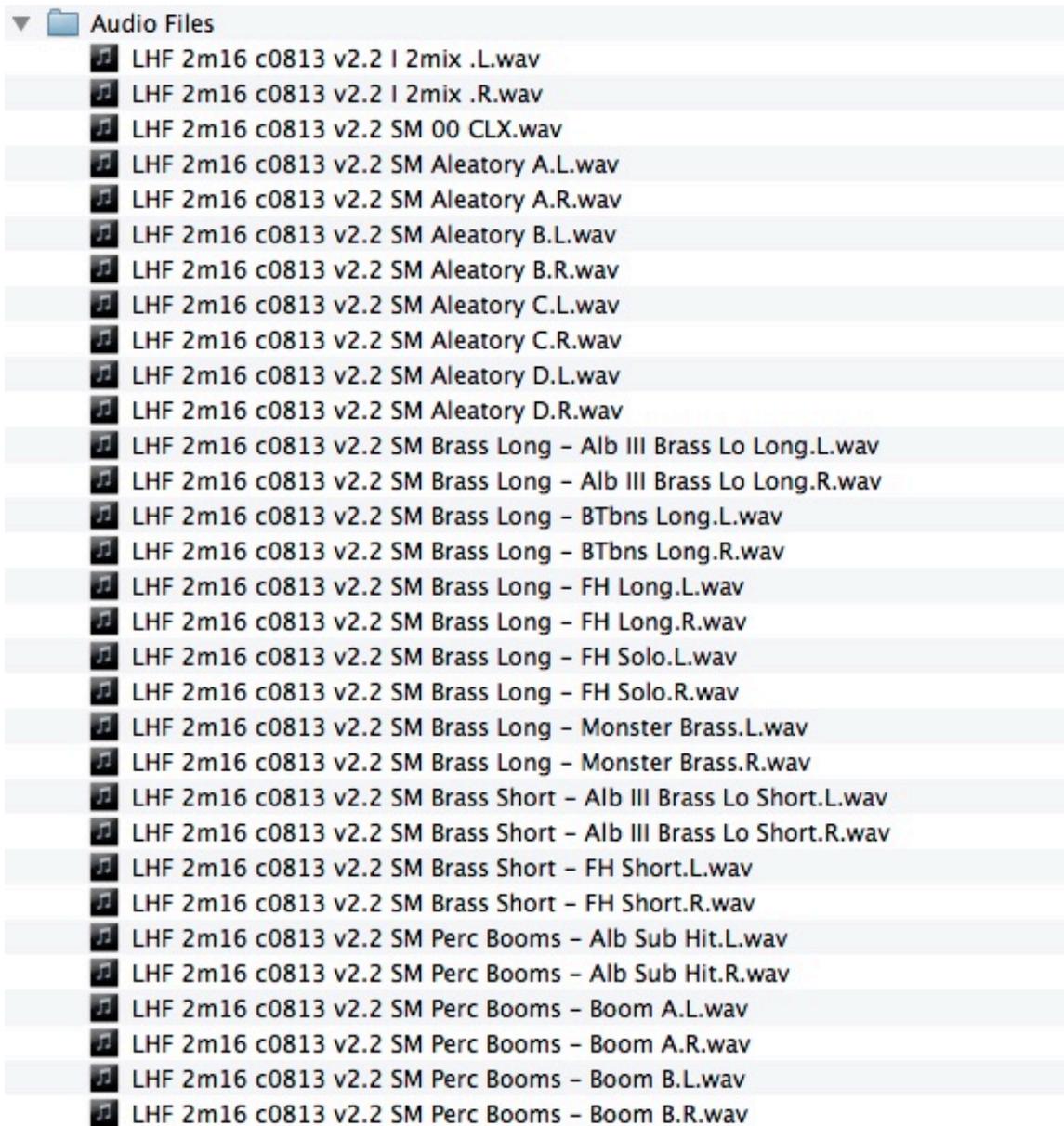If a Pro Tools Session is to be prepared, each cue folder should contain the following:

If a Pro Tools Session is **not** to be prepared, the cue folder should contain the following:

In each example, the "MIDI" folder of course contains the MIDI export of the cue. The "Audio Files" folder in the PT example and the "Stems" folder in the non-PT example would contain all of the audio files for the cue.

Note that if a Pro Tools session is not to be prepared, it is useful to include a folder within each cue folder that is titled with the timecode start of each cue. The timestamps attached to Audio Files exported from certain DAWs are often incorrect, so having that information on hand would be very useful in the event that the cue does not timestamp into the correct place. This also helps us determine where to start the attached MIDI tempo grid within our Pro Tools session.

Within the Audio Files or Stems folder, here is an example of what that should contain *(the screenshot does not include all files)*:

```
▼  📁 Audio Files
      🎵 LHF 2m16 c0813 v2.2 I 2mix .L.wav
      🎵 LHF 2m16 c0813 v2.2 I 2mix .R.wav
      🎵 LHF 2m16 c0813 v2.2 SM 00 CLX.wav
      🎵 LHF 2m16 c0813 v2.2 SM Aleatory A.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Aleatory A.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Aleatory B.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Aleatory B.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Aleatory C.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Aleatory C.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Aleatory D.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Aleatory D.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – Alb III Brass Lo Long.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – Alb III Brass Lo Long.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – BTbns Long.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – BTbns Long.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – FH Long.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – FH Long.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – FH Solo.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – FH Solo.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – Monster Brass.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Long – Monster Brass.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Short – Alb III Brass Lo Short.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Short – Alb III Brass Lo Short.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Short – FH Short.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Brass Short – FH Short.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Perc Booms – Alb Sub Hit.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Perc Booms – Alb Sub Hit.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Perc Booms – Boom A.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Perc Booms – Boom A.R.wav
      🎵 LHF 2m16 c0813 v2.2 SM Perc Booms – Boom B.L.wav
      🎵 LHF 2m16 c0813 v2.2 SM Perc Booms – Boom B.R.wav
```

Note once again that the naming convention is clear and consistent for each element and that there is a click and stereo reference mix included. Also important to note is that the picture guide tracks (Dx & Fx) are **NOT** located in this folder. There should only be one copy of these files delivered to the mix that all relevant cues will link to.

V. Pro Tools Session Structure

If you or a member of your team has access to a copy of Pro Tools, it is very helpful to the mixing team for you to prepare and organize all of the audio files and the tempo and meter grid into a Pro Tools session prior to delivering each cue to the mix.

If this is to be done, there are some specifics as to how each session should be prepared, organized, and setup. As always, consistency from cue to cue is key.

Here is a screenshot of an ideal Synthmaster Pro Tools session for delivery to a mix *(the screenshot does not include all tracks)*:
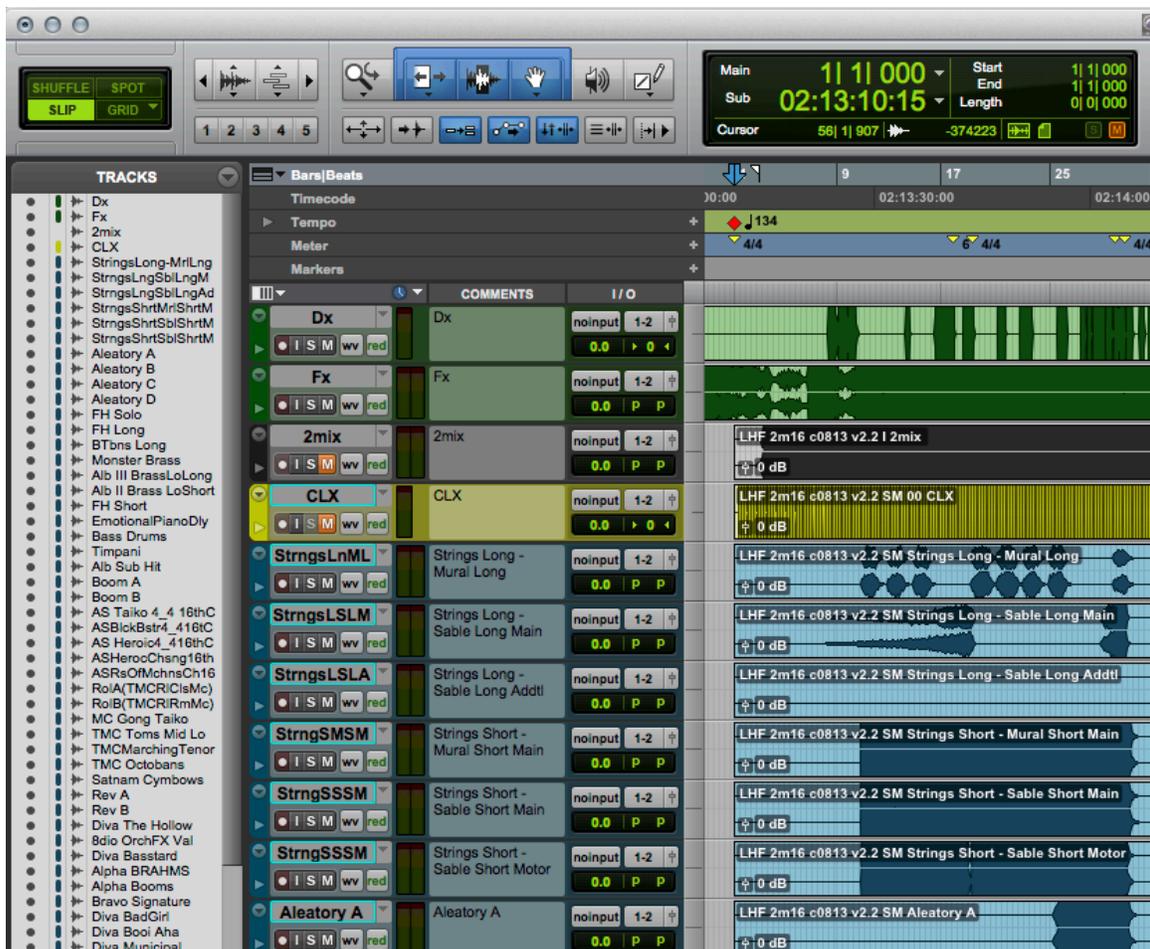
Tracks:

You will see that the session contains the following tracks:

Dx *(note that this audio file is **not** in the cue's Audio Files folder)*
Fx *(note that this audio file is **not** in the cue's Audio Files folder)*
2mix
CLX
Each element on it's own track

You'll also notice that the track names have been edited to remove the showcode, cue number, version number, and picture version so that the track name simply lists the element name. This step really helps to make the tracks easier to read, especially when working with a very large session.

In addition to cleaning up the track name, each track name has also been copied to the comments field so that longer names can clearly be read.

This session example also shows that each audio file starts exactly at Bar 1, Beat 1, regardless of where the actual audio data starts within the track.

As noted earlier in this guide, the guide tracks (Dx, Fx) contained in the session link to a ***single*** copy of those Audio Files instead of having duplicate copies of these files in every cue's Audio Files folder. This helps drastically reduce the amount of hard drive space that these sessions take up and in the event that you are delivering cues to the mix over the Internet, this will save an enormous amount of upload and download time due to the file size of each cue being drastically smaller.

All tracks also should contain **no** automation.

Do note that the example session above does not contain the picture file on a picture track but this could be included as well.

Session Settings:

Each session start time should either be set to 00:00:00:00 or to the hour of the reel the cue is contained in. For example, the example cue is in Reel 2 so the session start time could be 02:00:00:00 or 00:00:00:00. Regardless of which start time you choose to use, the start time should be consistent from session to session. Either all sessions should be set to 00:00:00:00 or each session should be set to the hour associated with the reel number.

The frame rate for each session should also be checked to ensure that it matches the frame rate of the picture file.

The clock settings are irrelevant as that will be set to the appropriate settings depending on the configuration of your mixer's studio.

Lastly, please confirm that the session is set to the appropriate sample and bit rate.

Other Settings:

In general, it is likely wise to match the shown rulers, track heights, edit window views, and section sizes to the example above but these things are ultimately not essential. It is very likely that the mixer or assistant will simply be importing the tracks and tempo grid from your prepared session into their mix template, which will have those parameters set to their desired setting.

VI. Delivery Methods

Once you have cues ready to be delivered to the mix, there a few methods of delivery that could be utilized.

If you are located in the same city as your mixing team, the ideal way to deliver elements to the mix is on a physical hard drive. This drive would contain a folder with every cue's folder within that folder. The drive also should have a separate "PIX" folder that contains all the versions of picture that are needed for the mix, as well as separate WAV files of the guide tracks. If the editorial team did not provide separate guide tracks from the QT file, it would be useful for you to export the attached audio from each QT file as a separate WAV file that can be imported into each session.

If you are not located in the same city as the mixing team or if it is not possible to hand deliver a drive, an online delivery method is acceptable.

In that event, it will save a lot of time in the downloading process to compress or "zip" each cue folder into a zip file. Each version of each reel of picture should also be compressed into a zip file so that those will be easier to download. When compressing these folders, please open up each zip file after the compression completes to verify that they are not corrupted.

VII. Conclusion

Hopefully this guide has given you a clear description of what needs to be delivered to your mix and how it should be executed and organized.

As there are a lot of very specific steps to be taken in this process, it is essential that each cue's deliverables are checked back before sending them to the mix team. Mistakes happen and it's often not possible to catch every issue but simply checking through each cue after it's prepared will often catch a multitude of issues that can be corrected before the cue is sent off to the mix.

If you have built a Pro Tools session, check to make sure that the cue is in the correct place against picture and listen back to the sum of all the splits against the 2mix to make sure all the elements of the cue have been provided and are in sync with the cue.

As mentioned earlier, do be sure to confirm the many technical and organizational details described in this guide with your mixing team as there may be differences specific to your project.